

United States International Trade Commission

The Information Technology Agreement

Advice and Information on
the Proposed Expansion:
Part 1

Investigation No. 332-532

USITC Publication 4355

October 2012



U.S. International Trade Commission

COMMISSIONERS

Irving A. Williamson, Chairman

Daniel R. Pearson

Shara L. Aranoff

Dean A. Pinkert

David S. Johanson

Meredith M. Broadbent

Robert B. Koopman

Director, Office of Operations

Karen Laney

Director, Office of Industries

**Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436**

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

The Information Technology Agreement Advice and Information on the Proposed Expansion: Part 1

Investigation No. 332-532



This report was prepared principally by

Project Leader

Shannon Gaffney

shannon.gaffney@usitc.gov

Deputy Project Leaders

Heidi Colby-Oizumi

heidi.colby@usitc.gov

Jeanette Leary

jeanette.leary@usitc.gov

Office of Industries

Ray Cantrell, Heidi Colby-Oizumi, Andy David, Sharon Ford, Dennis Fravel, Shannon Gaffney, Alberto Goetzl, Vincent Honnold, John Kitzmiller, Jeanette Leary, Kathryn Lundquist, Deborah McNay, Alex Parcan, Philip Stone, Karen Taylor, Mihir Torsekar, Karl Tsuji, and Linda White

Office of Tariff Affairs and Trade Agreements

Scott Baker

Office of the General Counsel

William Gearhart

Content Reviewers

Deborah McNay and Joanne Guth

Editorial Reviewer

Peg Hausman

Administrative Support

Monica Reed, Trina Chambers, and Wanda Tolson

Help Desk and Customer Service Division

Under the direction of

Michael Anderson, Chief

Advanced Technology and Machinery Division

CONTENTS

	<i>Page</i>
Acronyms	iii
Executive Summary	v
Chapter 1: Introduction	1-1
Organization of the report	1-2
Scope and approach	1-2
Chapter 2: Product Information	2-1
Introduction	2-1
Appendices	
A. Request letter	A-1
B. <i>Federal Register</i> notice	B-1
C. Positions of interested parties.....	C-1
Tables	
2.1 List of products for proposed expansion of Attachment A, by HS subheading	2-3
2.2 List of products for proposed expansion of Attachment B, wherever classified.....	2-52

Acronyms

AC	alternating current
ATMs	automated teller machines
CD	compact disc
CFL	compact fluorescent lamp or compact fluorescent light
CPMA	Color Pigments Manufacturer's Association
CRT	cathode ray tube
DALI	digital addressable lighting interface
DVD	digital versatile disc
ESA	Entertainment Software Association
GPS	global positioning system
HS	Harmonized System (international)
HTS	Harmonized Tariff System of the United States
ITA	Information Technology Agreement
ICT	information and communications technology
IR	infrared
IT	information technology
ITS	intelligent transportation system
kVA	kilovolt-amperes
KW	kilowatt
LCD	liquid crystal display
LED	light-emitting diode
MCO	multicomponent integrated circuits
MEMS	micro-electromechanical systems
MCPs	multichip integrated circuits (multichip package)

Acronyms—*Continued*

MFN	most favored nation
mm	millimeters
MRI	magnetic resonance imaging
NAPIM	National Association of Printing Ink Manufacturers
NEMA	National Electrical Manufacturers Association
OECD	Organisation for Economic Co-operation and Development
PC	personal computer
PCA	printed circuit assembly
PCB	printed circuit board
PDA	personal digital assistant
PFA	perfluoroalkoxy
PLC	programmable logic controllers
POSA	point-of-sale activation
PRBA	Portable Rechargeable Battery Association
SiC	silicon carbide
WCO	World Customs Organization
WTO	World Trade Organization
USB	universal serial bus
USITC	United States International Trade Commission
USTR	United States Trade Representative
UV	ultraviolet
V	volts
W	watts

Executive Summary

Under the Information Technology Agreement (ITA), a plurilateral accord that emerged from the Uruguay Round of trade negotiations, signatory countries agreed to eliminate tariffs on specific technology and telecommunications products. Because signatories agreed to apply tariff liberalization on a most-favored-nation (MFN) basis, signatory countries liberalized their tariffs on ITA products for all World Trade Organization (WTO) members. The ITA was concluded in late 1996 with 28 WTO member countries and now includes 75 WTO members.

Signatories to the ITA meet periodically to review whether the agreement should be expanded to cover additional products. At the May 15, 2012, meeting of the WTO ITA committee, ITA participants agreed to begin formal consultations on additional product coverage in September 2012.

Following the May 15th meeting, the United States Trade Representative (USTR) asked the U.S. International Trade Commission (Commission or USITC) to deliver two reports providing advice and information on a draft list of products that could be considered for addition to ITA product coverage. This draft list was prepared by a number of ITA participant countries. The USITC's first report lists both the information and communications technology (ICT) purposes and the non-ICT purposes for which each of these products is used, and summarizes information provided by interested parties to the Commission on the import sensitivity of these products. The second report, to be delivered in February 2013, will identify tariffs in major markets, the major producing countries, the leading U.S. export markets, and the leading sources of U.S. imports for each of the products on the list. In addition, the second report will examine benefits to the U.S. industry of ITA expansion, including information on increased market access and export opportunities in selected key subsectors.

Main Findings

The proposed product expansion list covers 130 product codes of the international Harmonized System (HS) (or 439 product descriptions). Based on information submitted by U.S. industry and interested parties to this investigation, the following nine product codes (or 11 product descriptions) were identified as import sensitive.

HS Code	Description ^a
321511	Printing ink, black
321511 ex ^b	Printing ink (black) packaged in the ink jet cartridge
321519	Printing ink, other than black
321519 ex	Printing ink (other than black) packaged in the ink jet cartridge
321590	Inks, other than printing ink
370790	Other (Chemical preparation for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use)
690911 ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays
690919 ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays
741011 ex	Copper foil of refined copper not backed of thickness not exceeding 0.15 mm designed for printed circuits
741021 ex	Copper clad laminates backed with paper, paperboard, plastics, or similar backing materials of a thickness (excluding any backing) not exceeding 0.15 mm
900110	Optical fibers, optical fiber bundles and cables

^aProduct descriptions in this table appear directly from the list provided to USITC by the USTR, as supplied by ITA participant countries.

^bThe "ex" marking flags proposed products that do not correspond to the entire HS 6-digit subheading, but rather comprise only a portion of, or a particular product within, the coverage of the 6-digit category.

For the majority of proposed products on the list, ICT uses were identified. For many products, both ICT and non-ICT uses were noted. Further details on uses and import sensitivities are provided in chapter 2.

CHAPTER 1

Introduction

One of the objectives of the Uruguay Round of trade negotiations was to open markets by reducing or eliminating tariff barriers. In its “zero for zero” initiative during the Uruguay Round, the United States listed electronic products as one of several possible sectors for reciprocal elimination of duties among its major trading partners. The Information Technology Agreement (ITA), signed by 28 countries or customs territories¹ during the WTO ministerial meeting in Singapore in December 1996, made significant progress toward this goal by requiring signatories to the ITA to eliminate tariffs on certain information technology products, with the agreement to enter into force once the signatories accounted for at least 90 percent of world trade in these products. The original signatories accounted for only 83 percent of world trade in information technology products. With the acceptance of several additional countries, which put coverage over the 90 percent threshold, the ITA entered into force with first stage tariff reductions on July 1, 1997. Presently, the number of signatories to the ITA has grown to 75, and the agreement now covers over 96 percent of world trade in the covered products.²

Signatories to the ITA agreed to meet periodically to review the list of covered products contained in the attachments to the ITA in order to decide whether to modify the attachments, either by adding new products in response to technological advances or by incorporating changes in tariff nomenclature used by the international Harmonized System (HS).³ At a May 15, 2012, meeting of the Committee of Participants on the Expansion of Trade in Information Technology Products (ITA Committee), ITA participants agreed to consult formally on product coverage beginning in September 2012.

On July 31, 2012, the U.S. International Trade Commission (Commission or USITC) received a letter from the United States Trade Representative (USTR) requesting that the Commission, pursuant to section 115 of the Uruguay Round Agreements Act (19 U.S.C. 3524) and 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332 (g)), provide advice and information on the list of products attached to the letter (see appendix A)⁴ that consists of products proposed by ITA participants for inclusion in an expanded ITA.⁵ The USTR asked the Commission to deliver its advice and information in two reports. This first report lists both the information and communications technology (ICT) and non-ICT purposes for which each product on the list is used, and also identifies the products that U.S. industry and other interested parties view as import sensitive. ICT uses have been

¹ Original signatories to the ITA are as follows (individual European Union members are in italics): Australia, *Austria*, *Belgium*, Canada, *Denmark*, *Finland*, *France*, *Germany*, *Greece*, Hong Kong (China), Iceland, *Ireland*, Indonesia, *Italy*, Japan, Republic of Korea (Korea), *Luxembourg*, *the Netherlands*, Norway, *Portugal*, Singapore, *Spain*, *Sweden*, Switzerland (including Liechtenstein), Taiwan (Chinese Taipei), Turkey, *United Kingdom*, and the United States.

² WTO, “15 Years of the Information Technology Agreement,” May 2012, 3, 16.

³ ITA participants meet under the auspices of the WTO ITA Committee.

⁴ As indicated in the USTR’s letter, under section 115 of the Uruguay Round Agreements Act (19 U.S.C. § 3524), the President is required to seek advice from the USITC regarding the proposed action.

⁵ The proposed product list, according to the cover note, was compiled from ITA member proposals “subject to the obligations set out in the Information Technology Agreement.”

indicated by Commission staff for inputs, parts, and accessories to ICT products; machines and equipment used to manufacture ICT goods or parts; and end-use ICT products.

The second report, to be delivered in February 2013, will identify tariffs in major markets, the major producing countries, the leading U.S. export markets, and the leading sources of U.S. imports for each product on the list. In addition, it will provide an overview of selected key subsectors, examining benefits to the U.S. industry of ITA expansion, including information on increased market access and export opportunities for products in these subsectors.

Organization of the Report

The remainder of this chapter describes the report's analytical approach and provides an overview of the report's scope. Chapter 2 presents tables giving specific information for each of the products on the USTR's list, including ICT and non-ICT uses, information on import sensitivity, and other relevant information received during the course of the investigation. Appendix A reproduces the USTR's request letter, which includes the proposed product list, while appendix B reproduces the *Federal Register* notice initiating the investigation. Appendix C summarizes the positions of interested parties who submitted written statements to the Commission in connection with this investigation.

Scope and Approach

As requested by the USTR, this first report has two components: (1) information that indicates both the ICT and non-ICT purposes for which each product on the list is used; and (2) information that identifies products that U.S. industry and other interested parties view as import sensitive. The USTR requested that the Commission provide this first report by October 24, 2012, and rely primarily on publicly available information and information furnished by interested parties in response to the Commission's notice of investigation.

To prepare the first report, the Commission interviewed industry associations, companies, and other federal agencies with related expertise by telephone, by email, and in person, and reviewed product literature and submissions made to the Commission in response to a *Federal Register* notice published on August 13, 2012 (appendix B). The Commission received a total of 10 written submissions, 9 of which are summarized in appendix C.⁶ The views and information in the 10 submissions are also incorporated into the Commission's report, as appropriate.

There is no universally accepted definition of ICT. As a result, views differ widely as to what products may be said to be used for ICT purposes. The ITA itself refers to

⁶ The 10th submission was not summarized because it consisted entirely of confidential business information.

“information technology products” and includes a list of products covered under the ITA, but provides no further details. In considering whether a product is used for ICT purposes, Commission staff examined definitions developed by the World Bank, the Organisation for Economic Co-operation and Development (OECD), and the U.S. Census Bureau. For the purposes of this report, each product was considered on a case-by-case basis. The Commission is aware that industry definitions vary and that researchers using different definitions may arrive at different conclusions about ICT and non-ICT purposes for which each product on the list is used.

CHAPTER 2

Product Information

Introduction

This chapter contains information on the list of products attached to the USTR's request letter, presented in tabular form (tables 2.1 and 2.2). Table 2.1 covers the products that were listed in attachment A to the USTR's request letter, while table 2.2 covers the products that were listed in attachment B to the request letter. The tables address each of the 439 products on the list, and display the following information:

- **HS classification and description.** The product classifications and descriptions on the list provided by the USTR were aggregated by USTR from several ITA participant countries' lists into one list, and are reproduced here directly from this list; spelling, punctuation, and capitalization are as in the original. Because the products and descriptions in the USTR's list are based on HS 2007 nomenclature, the tables in this report use the same nomenclature to identify the purposes for which the products are used and to give import sensitivity information, notwithstanding 2012 changes to the HS. The "ex" marking in the "ex-out" column flags proposed products that do not correspond to the entire HS 6-digit subheading, but rather comprise only a portion of, or a particular product within, the coverage of the 6-digit category. Often the ex-out is an effort to narrow the range of the products from the 6-digit category that would be involved in this expansion by specifying "for use in the manufacture of" or "for use in the production of" an established ICT product. This language in the product description does not preclude identification of a non-ICT use unless the products are unique to the ex-out description.
- **Examples of ICT uses.** The tables list ICT purposes for which the product is used, as identified by Commission staff or as provided by U.S. industry or other interested parties. Products without evident ICT uses are marked "none identified." The uses indicated in the report are not intended to be exhaustive, but rather to illustrate how the product is used.
- **Examples of non-ICT uses.** The tables also list non-ICT purposes for which the product is used, as identified by Commission staff or as provided by U.S. industry or other interested parties. Products without evident non-ICT uses are marked "none identified." Again, while the uses indicated in the report are not exhaustive, they illustrate how the product is used.

- **Import sensitivity.** The tables summarize views of interested parties on import sensitivity for specific products.¹ Import sensitivity is not defined in the request letter from USTR; as a result, import sensitivity is reported as defined by U.S. industry or other interested parties, not by the Commission. In cases where no information was provided on the import sensitivity of the product, it is marked “none identified.” In total, nine HS product codes were identified as import sensitive by U.S. industry and interested parties to the investigation.
- **Comments.** The comments column lists three types of information: (1) views of certain companies about whether specific products on the USTR’s list should be included in the ITA, reflecting their beliefs about whether or not ICT uses could be identified for the subject product; (2) ICT features or functions listed in product descriptions for products for which no ICT uses were identified; and (3) product descriptions or classifications that changed at the 6-digit level with the 2012 HS nomenclature.

¹ U.S. producers and industry associations that submitted public statements to the USITC are named in the tables. Those that expressed their views to Commission staff in emails or telephone interviews and requested that the information be treated as confidential business information are not referred to by name.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
321511		Printing ink, black	Used for digital printing	Used for non-digital printing	The National Association of Printing Ink Manufacturers (NAPIM) commented that this product is import sensitive because domestic producers face competition from imports. ⁴ The Color Pigments Manufacturers Association (CPMA) commented that this product is import sensitive as the elimination of duties would harm the domestic ink and color pigments industries, which are already under import pressure. ⁵	
	ex	Printing ink (black) packaged in the ink jet cartridge	Used for digital printing	None identified	NAPIM commented that this product is import sensitive because domestic producers face competition from imports. CPMA commented that this product is import sensitive as the elimination of duties would harm the domestic ink and color pigments industries, which are already under import pressure.	
321519		Printing ink, other than black	Used for digital printing	Used for non-digital printing	NAPIM commented that this product is import sensitive because domestic producers face competition from imports. CPMA commented that this product is import sensitive as the elimination of duties would harm the domestic ink and color pigments industries, which are already under import pressure.	
	ex	Printing ink (other than black) packaged in the ink jet cartridge	Used for digital printing	None identified	NAPIM commented that this product is import sensitive because domestic producers face competition from imports.	

¹ The following products have been proposed by Members to be subject to the obligations set out in the ITA. Some products in this list may already be covered by the Agreement; the proposals for these items are without prejudice to participants' existing rights and obligations under the ITA and the General Agreement on Tariffs and Trade (GATT 1994).

² Product descriptions in this table are taken directly from the list provided to the USITC by USTR, as supplied by ITA participant countries.

³ Several public submissions in connection with this investigation did not specify particular HS subheadings, but rather identified broad product groups. For further information on these broad categories, refer to the positions of interested parties in appendix C.

⁴ National Association of Printing Ink Manufacturers (NAPIM), interview with USITC staff, September 18, 2012. All citations to NAPIM in the tables are to this interview.

⁵ Color Pigments Manufacturers Association, email to USITC staff, October 2, 2012. All citations to CPMA in the tables are to this email.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
					CPMA commented that this product is import sensitive as the elimination of duties would harm the domestic ink and color pigments industries, which are already under import pressure.	
321590		Inks, other than printing ink	Used for ink jet refill kits and solder mask inks	Used as writing inks, in arts and crafts, for screen printing, and in anti-theft devices for clothing	NAPIM commented that this product is import sensitive because domestic producers face competition from imports. CPMA commented that this product is import sensitive as the elimination of duties would harm the domestic ink and color pigments industries, which are already under import pressure.	
350691	ex	Optically clear free-film adhesives for the manufacture of displays and touch screen panels	Used in computer displays and touch screen panels; televisions	None identified	None identified	
370110		For X-ray (Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	Used to make patterns for producing semiconductors and used for medical and dental diagnostics imaging	None identified	None identified	
370130		Other plates and film, with any side exceeding 255 mm	Used to make patterns for producing semiconductors and printed circuit boards; used in digital printing	Used to capture photographic or cinematographic images	Intel commented that this product is not import sensitive.	Intel supports inclusion of photomask blanks or photoblanks that are used to manufacture photomasks for the manufacture of semiconductors classified under HS subheading 3701.30 in the ITA.
370199		Other ((Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	Used to make patterns for producing semiconductors and printed circuit boards; used in digital printing	Used to capture photographic or cinematographic images	Intel commented that this product is not import sensitive.	Intel supports inclusion of photomask blanks or photoblanks that are used to manufacture photomasks for the manufacture of semiconductors classified under HS subheading 3701.99 in the ITA.
370242		Of a width exceeding 610 mm and of a length exceeding 200 m, other than for colour photography (Other film, without perforations, of a width exceeding 105 mm)	Used to make patterns for producing semiconductors and printed circuit boards; used in digital printing	Used to capture photographic or cinematographic images	None identified	
370243		Of a width exceeding 610 mm and of a length not exceeding 200 m (Other film, without perforations, of a width exceeding 105 mm)	Used to make patterns for producing semiconductors and printed circuit boards; used in digital printing	Used to capture photographic or cinematographic images	None identified	
370244		Of a width exceeding 105 mm but not exceeding 610 mm (Other film, without perforations, of a width exceeding 105 mm)	Used to make patterns for producing semiconductors and printed circuit boards; used in digital printing	Used to capture photographic or cinematographic images	None identified	
370590		Other photographic plates and film, exposed	Used to make	Used to display	Intel commented that this	Intel supports inclusion of exposed

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		and developed, other than motion-picture film, including photomasks and reticles	semiconductors; used in digital printing	photographic images	product is not import sensitive.	and developed photo masks and reticles classified under HS subheading 3705.90 in the ITA.
370710		Sensitizing emulsions	Used to etch printed circuits and to develop masks for producing integrated circuits and semiconductors; used in printers and multifunction machines	Used to develop photographic or cinematographic film	None identified	
370790		Other (Chemical preparation for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use)	Used as toner cartridges, photoresists, and developers for manufacturing integrated circuits	Used as photograph developers, couplers for color negative film	NAPIM commented that this product is import sensitive because domestic producers face competition from imports.	
390730	ex	Epoxide resins molding compounds for semiconductor encapsulation	Used in manufacture of printed circuit boards; semiconductor encapsulation	Used in protective coatings, adhesives, and composites	None identified	
	ex	Glass and epoxy, cotton paper and epoxy, phenolic cotton paper and woven glass and epoxy resins for the manufacture of printed circuits	Used in manufacture of printed circuit boards	Used in adhesives and composites	None identified	
392061	ex	Optical films of polycarbonates for the manufacture of LCD / LED displays and screens	Used in optical media (CDs and DVDs), liquid crystal display (LCD) and light-emitting diode (LED) displays	Used in automotive instrument displays and ophthalmic lenses	None identified	
392062	ex	Optical films of poly(ethylene terephthalate) for the manufacture of LCD / LED displays and screens	Used in LCD and LED displays	None identified	None identified	
392190	ex	Other plates, sheets, film, foil and strip of plastics, flexible, not reinforced with paper or combined with textile materials for the manufacture of printed circuits	Used in the manufacture of printed circuits	Used in packaging materials, reinforced plastic sheeting, and laminated films	None identified	
392310	ex	Articles of plastic for the conveyance, packing or shipping of semiconductor wafers, masks, and reticles	Used as plastic packaging for semiconductor wafers, masks, and reticles	None identified	Entegris commented that this product is not import sensitive. ⁶	Entegris supports inclusion of this product in the ITA.
392690	ex	Plastic enclosures or cases for use in goods classified in 85.17	Used as telephone enclosures and cell phone cases	None identified	Entegris commented that perfluoroalkoxy (PFA) nuts are not import sensitive.	Entegris supports inclusion of PFA nuts classified under HS subheading 3926.90 in the ITA.
	ex	Other articles of plastics for use in telecommunication and ICT devices	Used as plastic enclosures and cases for tablet computers and laptops	None identified	Entegris commented that PFA nuts are not import sensitive.	Entegris supports inclusion of PFA nuts classified under HS subheading 3926.90 in the ITA.
481190		Other paper, paperboard, cellulose wadding and webs of cellulose fibres	Used as a printing medium and insulation in wires and assemblies	Used for stationery and wrapping	The Forest and Paper Association commented that this product is not import sensitive.	

⁶ Entegris Inc., written submission to the USITC, September 5, 2012. All citations to Entegris in the tables are to this submission.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
490700	ex	Documents of title, specifically licenses to use software in printed form	Used to provide access to software in printed form	None identified	The Entertainment Software Association (ESA) commented that this product is not import sensitive. ⁷	ESA supports inclusion of this product in the ITA.
491110	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	Used to provide access to software, digital games, other internet content or telecom services	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of this product in the ITA.
491199	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	Used to provide access to software, digital games, other internet content or telecom services	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of this product in the ITA.
690310	ex	Graphite or SiC (silicon carbide) crucible for the manufacture of semiconductor devices	Used in silicon carbide manufacturing devices to make silicon crystals, which are then sliced into wafers for semiconductors	Used in manufacturing silicon crystals and wafers in the solar industry	None identified	
690911	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	Used as wafer polishing plates, plasma proof rings and domes, and parts for etching machines, light exposer, and chemical vapor depositions (film formation devices for wafers) in semiconductor and related product manufacturing	None identified	An industry source reported that this product is considered import sensitive owing to its relatively high value as compared with other articles covered under HS subheading 6909.11 not related to semiconductor manufacturing. ⁸	
690919	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	Used as wafer polishing plates, plasma proof rings and domes, and parts for etching machines, light exposer, and chemical vapor depositions (film formation devices for wafers) in semiconductor and related product manufacturing	None identified	An industry source reported that this product is considered import sensitive owing to its relatively high value as compared with other articles covered under HS subheading 6909.19 not related to semiconductor manufacturing. ⁹	
700220	ex	Unworked glass rods of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	Used as parts in semiconductor manufacturing equipment because they are very high purity clear glass with	None identified	None identified	

⁷ Entertainment Software Association (ESA), written submission to the USITC, September 6, 2012. All citations to ESA in the tables are to this submission.

⁸ Industry representative, email message to USITC staff, August 30, 2012.

⁹ Industry representative, email message to USITC staff, August 30, 2012.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			properties such as chemical resistance and high temperature tolerance			
700231	ex	Unworked glass tubes of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	Used as parts in semiconductor manufacturing equipment and for wafer transport because they are very high purity clear glass with properties such as chemical resistance and high temperature tolerance	None identified	None identified	
700600		Glass of heading 70.03, 70.04 or 70.05, bent, edge-worked, engraved, drilled, enamelled or otherwise worked, but not framed or fitted with other materials	Used to manufacture blanks for extreme ultraviolet lithography and projection masks (photomasks) for photolithography of semiconductors (a process used to etch a path on the semiconductor wafer)	Used in automotive and building products such as unframed automobile windshields, flat glass windows, or glass countertops	None identified	
	ex	High purity fused silica plates for the manufacture of photoblanks or photomasks, or otherwise designed for the manufacture or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof, or telecommunications equipment or parts or accessories of any of the foregoing	Used to manufacture blanks for extreme ultraviolet lithography and projection masks (photomasks) for photolithography of semiconductors (a process used to etch a path on the semiconductor wafer)	None identified	None identified	
701400	ex	Signaling glassware and optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, integrated circuits or flat panel displays	Used for semiconductor and printed circuit manufacturing equipment including calcium fluoride crystals used for optical windows in semiconductor manufacturing equipment, and specialty mirrors used in optic bench areas for redirecting a laser beam for scribing wafers	None identified	None identified	
701710	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Used as wafer process handling equipment of fused quartz or fused silica and includes crucibles, bell jars, insulators, shields and other custom lab parts for semiconductor and related devices manufacturing; often used in conjunction with reactor tubes	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
702000	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Used for glass parts for semiconductor manufacturing equipment, such as vacuum systems for semiconductor solvent recovery and parts, accessories for physical vapor deposition systems, as well as other front end cleaning; often used in conjunction with reactor tubes	None identified	None identified	
741011	ex	Copper foil of refined copper not backed of thickness not exceeding 0.15mm designed for printed circuits	Used to produce copper clad laminates for printed circuits	None identified	Industry representatives report import sensitivity due to production moving offshore, which has decreased U.S. consumption, while imports are anticipated to increase. ¹⁰ Another industry representative reported no import sensitivity, owing to significant imports from Asia, while a further source reported no import sensitivity, as the firm is not a U.S. producer. ¹³	Several industry representatives oppose the inclusion of this product in the ITA. ¹¹ Another industry representative supports the inclusion of this product in the ITA. ¹²
741021	ex	Copper clad laminates backed with paper, paperboard, plastics, or similar backing materials of a thickness (excluding any backing) not exceeding 0.15 mm	Used to produce rigid and flexible printed circuits	None identified	Industry representatives report import sensitivity because U.S. market share has declined due to growing competition from imports, primarily from Asia, and the movement of U.S. production offshore. ¹⁴ Another industry representative reported no import sensitivity owing to significant imports from Asia. ¹⁵	Several industry representatives oppose the inclusion of this product in the ITA. ¹⁶
841381		Pumps (Other pumps; liquid elevators)	Used to actuate fluids in the production of semiconductors	Used to move fluids (liquids) by mechanical action	None identified	
841410	ex	Vacuum pumps of a kind used for the production of semiconductors or flat panel displays	Used to actuate fluids in the production of semiconductors	None identified	None identified	
841459		Other Fans	Used to minimize heat in computer equipment,	Used for cooling and other uses in numerous	Both Intel and Alcatel-Lucent commented that this product is	Intel supports inclusion in the ITA of DC fans and cooling fans used in

¹⁰ Industry representatives, email messages to USITC staff, September 12, 2012, September 13, 2012, and September 16, 2012.

¹¹ Industry representatives, email messages to USITC staff, September 12, 2012, September 13, 2012, and September 16, 2012.

¹² Industry representative, telephone interview with USITC staff, September 11, 2012.

¹³ Industry representatives, email messages to USITC staff, September 12, 2012 and September 14, 2012.

¹⁴ Industry representatives, email messages to USITC staff, September 12, 2012, September 13, 2012, and September 16, 2012.

¹⁵ Industry representative, email message to USITC staff, September 14, 2012.

¹⁶ Industry representatives, email messages to USITC staff, September 12, 2012, September 13, 2012, and September 16, 2012.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			networking equipment, and peripherals	products, including blowers for pipe organs, turbochargers, motor vehicles, centrifugals, and axials	not import sensitive. ¹⁷	conjunction with microprocessors classified under HS subheadings 8414.59 and 8414.90 or fans for use with any other products covered by the ITA. Alcatel-Lucent supports inclusion of fans, fan trays, and parts thereof for use in telecommunications and data processing systems classified under HS subheadings 8414.59 and 8414.90 in the ITA.
	ex	Fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	Used to minimize heat in computer equipment and peripherals and telecommunications equipment	None identified	Both Intel and Alcatel-Lucent commented that this product is not import sensitive.	Intel supports inclusion in the ITA of DC fans and cooling fans used in conjunction with microprocessors classified under HS subheadings 8414.59 and 8414.90 or fans for use with any other products covered by the ITA. Alcatel-Lucent supports inclusion of fans, fan trays, and parts thereof for use in telecommunications and data processing systems classified under HS subheadings 8414.59 and 8414.90 in the ITA.
841490	ex	Parts of fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	Used to minimize heat in computer equipment and peripherals	None identified	Both Intel and Alcatel-Lucent commented that this product is not import sensitive.	Intel supports inclusion in the ITA of DC fans and cooling fans used in conjunction with microprocessors classified under HS subheadings 8414.59 and 8414.90 or fans for use with any other products covered by the ITA. Alcatel-Lucent supports inclusion of fans, fan trays, and parts thereof for use in telecommunications and data processing systems classified under HS subheadings 8414.59 and 8414.90 in the ITA.
841510	ex	Air conditioning machines which have apparatus for communication in wired or wireless network (of window or wall types, self-contained or "split-system")	None identified	Used in cooling of commercial buildings and residences	None identified	
	ex	Air conditioning machines which can process digital signals or communicate with or without lines	None identified	Used in cooling of commercial buildings and residences	None identified	

¹⁷ Intel, written submission to the USITC, September 6, 2012. All citations to Intel in the tables are to this submission. Alcatel-Lucent, written submission to the USITC, September 6, 2012. All citations to Alcatel-Lucent in the tables are to this submission.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
841810	ex	Combined refrigerator-freezers, fitted with separate external doors which can process digital signals or communicate with or without lines	None identified	Used to store and refrigerate food	None identified	
841821	ex	Household type and compression-type refrigerators which have apparatus for communication in wired or wireless network	None identified	Used to store and refrigerate food	None identified	
	ex	Refrigerators, household type : Compression-type, which can process digital signals or communicate with or without lines	None identified	Used to store and refrigerate food	None identified	
841829	ex	Refrigerators, household type : not compression-type, which can process digital signals or communicate with or without lines	None identified	Used to store and refrigerate food	None identified	
841899	ex	Parts of house hold type refrigerators, freezers and other refrigerating or freezing equipment electric or other; heat pumps, where the parts are related to the functions that process digital signals or communicate with or without lines.	Used to enable wireless communication and process digital signals in refrigerators	None identified	None identified	
841939	ex	Spin dryers for machines and mechanical appliances for making semiconductors, flat panel displays and PCAs	Used in the production of semiconductor wafers	None identified	None identified	
841950	ex	Heat exchange units to be used for the production of semiconductors and flat panel displays	Used as a cooling device to transfer heat from one medium to another in the production processes of semiconductors and flat panel displays	None identified	None identified	
842010	ex	Roll laminators and laminate presses of a kind used for the production of printed circuits	Used to compress layers of laminate material together to make multilayer printed circuit boards (PCBs)	None identified	None identified	
842129	ex	Liquid filtering equipment for semiconductor and flat panel display manufacturing	Used to manufacture semiconductors and flat panel displays	None identified	Entegris commented that this product is not import sensitive.	Entegris supports inclusion of this product in the ITA, but recommends that a provision be included to restrict uses to semiconductors and flat panel displays.
842139	ex	Gas filtering equipment for semiconductor and flat panel display manufacturing	Used to manufacture semiconductors and flat panel displays	None identified	Entegris commented that this product is not import sensitive.	Entegris supports inclusion of this product in the ITA, but recommends that a provision be included to restrict uses to semiconductors and flat panel displays.
842199	ex	Parts of filtering equipment for semiconductor and flat panel display manufacturing	Used to manufacture semiconductors and flat panel displays	None identified	Entegris commented that this product is not import sensitive.	Entegris supports inclusion of this product in the ITA, but recommends that a provision be included to restrict uses to semiconductors and flat panel displays.
842489	ex	Spraying apparatus for etching, developing, stripping, or cleaning; or application of coating or sealants manufacture of printed circuits or printed circuit assemblies	Used to spray etchants (solutions primarily to etch patterns in copper sheets), developers, solvents,	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			sealants, coatings, or other materials on printed circuits or printed circuit assemblies			
842490	ex	Parts for spraying apparatus for etching, developing, stripping or cleaning; or application of coating or sealants for the manufacture of printed circuits or printed circuit assemblies	Used in machines that spray etchants, developers, solvents, sealants, coatings, or other materials on printed circuits or printed circuit assemblies	None identified	None identified	
842890	ex	Other machines for lifting, handling, loading or unloading printed circuits or substrates for the manufacture of printed circuit or printed circuit assemblies	Used to lift, handle, load, or unload printed circuits or substrates for printed circuits or printed circuit assemblies	None identified	None identified	
843139	ex	Hard disk process carriers, transport carriers and similar items specially designed for the manufacturing, transport, or storage of hard disk drive components	Used to transport hard disk drive components before, during, and after manufacturing	None identified	None identified	-
844230		Machinery, apparatus, and equipment	Used to apply digital text and graphics to printing plates, as instructed by a computer; includes printed circuit labeling machines	Used to apply text and graphics to printing plates by chemical and photosensitive processes; used in printing textiles and illustrations by repetitive printing process	None identified	
844240		Parts of the foregoing machinery, apparatus, or equipment	Used in printed circuit labeling machines and machines that digitally apply text and graphics to printing plates	Used in machines that apply text and graphics to printing plates by chemical and photosensitive processes; used in printing textiles and illustrations by repetitive printing process	None identified	
844250		Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)	Used to apply digital text and graphics to printing plates; used to laminate or electroplate printed circuit boards	Used to apply text and graphics to printing plates by chemical and photosensitive processes; used in printing textiles and illustrations by repetitive printing process	None identified	
	ex	Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits	Used to laminate or electroplate printed circuit boards	None identified	None identified	
	ex	Plates for applying solder, flex adhesive, or sealants to printed circuits	Used to laminate or electroplate printed circuit boards	None identified	None identified	
844319		Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442)	None identified	Used for printing on textiles	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
844331		Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data-processing machine or to a network	Used to transmit, receive, copy, and/or print text and images	None identified	None identified	
844332		Other, capable of connecting to an automatic data processing machine or to a network (Other printers, copying machines, and facsimile machines, whether or not combined)	Used to print text and images in connection with computers and similar devices	None identified	None identified	
	ex	Screen printing machinery for the manufacture of printed circuit boards or printed wiring boards	Used to print circuit boards and wiring boards	None identified	None identified	
844339		Other (Other printers, copying machines and facsimile machines, whether or not combined)	Used to transmit, receive, copy, and print text and images	None identified	None identified	
844391		Parts and accessories of printing machinery used for printing by means of plates, cylinders, and other printing components of heading 8442.	Used in printing machinery. Includes casings, plastics, plates, cylinders, and ink cartridges	Used in the manufacture of products that print on textiles and consumer goods	None identified	
	ex	Parts of Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits; Parts of plates for applying solder, flex adhesive, or sealants to printed circuits	Used in the production of printed circuit boards	None identified	None identified	
844399		Parts and Accessories, Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof)	Used in devices that transmit, receive, copy, and print text and images	None identified	None identified	
845011	ex	Fully-automatic household or laundry-type washing machines which have apparatus for communication in wired or wireless network	None identified	Used to launder textiles, apparel, and other household items	None identified	Contains feature enabling communication with a wired or wireless network.
	ex	Household or laundry-type fully-automatic washing machines, which can process digital signals or communicate with or without lines	None identified	Used to launder textiles, apparel, and other household items	None identified	Contains feature enabling communication with a wired or wireless network.
845012	ex	Household or laundry-type washing machines, which can process digital signals or communicate with or without lines	None identified	Used to launder textiles, apparel, and other household items	None identified	Contains feature enabling communication with a wired or wireless network.
845019	ex	Household or laundry-type washing machines, including machines which both wash and dry, which can process digital signals or communicate with or without lines	None identified	Used to launder and dry textiles, apparel, and other household items	None identified	Contains feature enabling communication with a wired or wireless network.
845090	ex	Parts of household or laundry-type washing machines, where the parts are related to the functions that process digital signals or	Used to enable wireless communication and to process digital signals in	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		communicate with or without lines	washing machines			
845610	ex	Machine tools operated by laser or other light or photo beam processes for drilling, routing, or marking printed circuit substrates or printed circuits	Used to drill, route, or mark printed circuit substrates or printed circuits	None identified	None identified	
	ex	Machine tools operated by laser or other light or photo beam processes for use in cutting process or drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays	Used to drill or cut holes in printed circuits, parts of mobile devices, semiconductors, or flat panel displays	Used to drill or cut holes in materials such as plastics or metals that are parts for the motor vehicle, aerospace, and machinery industries	None identified	
845620	ex	Machine-tools operated by ultrasonic processes for use in machining printed circuits, parts of mobile devices, semiconductor or flat panel displays.	Used in machining printed circuits, parts of mobile devices, semiconductors, or flat panel displays	Used in machining parts for the motor vehicle, aerospace, and machinery industries	None identified	
845630	ex	Machine tools operated by electro-discharge processes for cutting wafers	Used to cut silicon into wafers for semiconductors	Used to cut metal blocks and bars to make molds and dies for metals, plastics, and other materials that in turn are used to produce parts for motor vehicle, aerospace, consumer products, and other industries	None identified	
845690	ex	Plasma cleaner machines that remove organic contaminants from electron microscopy specimens and specimen holders in semiconductor production process	Used in semiconductor production	None identified	Intel commented that this product is not import sensitive.	Intel supports the inclusion of this product in the ITA.
845710	ex	Machining centres of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Used to machine metal parts for mobile devices, automatic data processing machines, semiconductors, or flat panel displays	Used to machine metal parts for the motor vehicle, aerospace, and machinery industries	None identified	
845811	ex	Numerically controlled (horizontal lathes) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Used to turn (shape through cutting) metal shafts or round parts for mobile devices, automatic data processing machines, semiconductors, or flat panel displays	Used to turn (shape through cutting) metal shafts or round parts for the motor vehicle, aerospace, and machinery industries	None identified	
845891	ex	Numerically controlled (other lathes) of a kind used for the production of parts of mobile devices, PC, semiconductor and flat panel displays.	Used to turn (shape through cutting) metal shafts or round parts for mobile devices, automatic data processing machines, semiconductors, or flat panel displays	Used to turn (shape through cutting) metal shafts or round parts for the motor vehicle, aerospace, and machinery industries	None identified	
845921	ex	Numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat	Used to drill holes in metal parts for mobile devices, automatic data processing machines, semiconductors,	Used to drill holes in metal parts for the motor vehicle, aerospace, and machinery industries	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		panel displays.	or flat panel displays			
845961	ex	Numerically controlled (Other milling machines) numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Used to mill with a circular cutting tool shapes in metal parts for mobile devices, automatic data processing machines, semiconductors, or flat panel displays	Used to mill with a circular cutting tool shapes in metal parts for the motor vehicle, aerospace, and machinery industries	None identified	
846150	ex	Sawing or cutting-off machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	Used to saw or cut off pieces of metal rod or bar stock to make blanks for parts for mobile devices and automatic data processing machines	Used to saw or cut off pieces of metal rod or bar stock to make blanks for parts for the motor vehicle, aerospace, fabricated metals, and machinery industries	None identified	
846210	ex	Forging or die-stamping machines (including presses) and hammers of a kind used for the production of parts of mobile devices, automatic data processing machines.	Used to forge or die-stamp metal parts for mobile devices and automatic data processing machines	Used to forge or die-stamp metal parts for the motor vehicle, aerospace, fabricated metals, and machinery industries	None identified	
846221	ex	Numerically controlled (Bending, folding, straightening or flattening machines (including presses)) of a kind used for the production of parts of mobile devices, automatic data processing machines.	Used to bend, fold, straighten, or flatten metal for parts for mobile devices or automatic data processing machines	Used to bend, fold, straighten, or flatten metal for parts for the motor vehicle, aerospace, fabricated metals, and machinery industries	None identified	
846592	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits	Used for milling or molding (by cutting) slots, cutouts, or printed circuit board profiles in printed circuit materials	None identified	None identified	
	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits, or parts of mobile devices, automatic data processing machines, or flat panel displays.	Used to mill or mold (by cutting) slots, cutouts, or printed circuit board profiles in printed circuit board materials; or for milling plastic or other nonmetal material parts for mobile devices, automatic data processing machines, or flat panel displays	None identified	None identified	
846593	ex	Grinding, sanding or polishing machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	Used to grind, sand, or polish parts made of rubber, hard plastics or similar materials (other than metal and glass) for parts of mobile devices and automatic data processing machines	None identified	None identified	
846595	ex	Drilling machines for drilling holes in printed circuits or printed circuit laminate	Used to drill holes in printed circuits or printed circuit laminates	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
	ex	Drilling or mortising machines for use in drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	Used to drill holes or mortise (cut square holes) in printed circuits and parts of mobile devices, semiconductors, or flat panel displays	None identified	None identified	
846900		Typewriters other than printers of heading 84.43; wordprocessing machines.	Used to print ink impressions on a medium, usually paper	None identified	None identified	
847210		Duplicating machines	Used to digitally make copies of paper documents	Uses heat-sensitive or chemical methods to create decorative art	None identified	
847230		Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps	Used to electronically prepare documents for mailing	Used to perforate, staple, sort, and fold paper documents	None identified	
847290	ex	Automatic banknote dispensers, coinsorting machines, coin-counting, and other currency coin handling machines	Used to electronically dispense banknotes as well as to sort, count, and handle coins; includes automatic teller machines (ATMs)	None identified	None identified	
847310		Parts and accessories of the machines of heading 84.69	Used in or with word processing machines	None identified	None identified	
847340		Parts and accessories of the machines of heading 8472	Used in or with office machines such as duplicating machines and automatic teller machines	None identified	None identified	
	ex	Parts and accessories of the machines of heading 847210, automatic banknote dispensers, coinsorting machines, coin-counting in 847290, and other currency coin handling machines, and automatic teller machines in 847290	Used in or with office machines such as duplicating machines and automatic teller machines	None identified	None identified	
847521		Machines for making optical fibers and preforms thereof	Used to make fiber optic cable	None identified	None identified	
847590	ex	Parts for machines described in 8475.21	Parts of machines used to make fiber optic cable	None identified	None identified	
847689	ex	Money-changing machines	None identified	Used to exchange money, particularly by exchanging large bills into smaller bills	None identified	
847690	ex	Parts of money-changing machines and DVD vending kiosks	Used in computerized DVD vending machines	Used in machines that exchange money	None identified	
847950		Industrial robots, not elsewhere specified or included	Used to perform repetitive operations in the production of semiconductors, printed circuit boards, and electronics products; performing operations such as assembling components into parts, dispensing of	Used in a wide range of industries to perform repetitive or dangerous tasks, such as packaging of foods, assembly of pumps, and handling of hot metals in die-casting operations	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			materials such as sealants and adhesives, and manipulation (trimming, polishing, and buffing), inspection, and packaging			
847982	ex	Mixing, kneading or stirring machines, specifically machines for mixing etchant solutions for printed circuit assemblies	Used to mix liquid solutions (etchants) for etching copper foils in producing printed circuit assemblies	None identified	None identified	
847989	ex	Machines and mechanical appliances having individual functions which have apparatus for communication in wired or wireless network (not specified or included elsewhere in Chapter 84, other than those of subheadings 8479.10 to 8479.82)	Used to manufacture printed circuit assemblies and optical media	Used as oil and gas equipment, floor polishers, trash compactors, and carpet sweepers	None identified	Contains feature enabling communication in wired or wireless network.
	ex	Automated electronic component placement machines for the manufacture of printed circuit assemblies	Used for surface-mounting capacitors, integrated circuits, and other semiconductor devices onto printed circuit boards	None identified	None identified	
847990	ex	Parts for automated electronic component placement machines for the manufacture of printed circuit assemblies in subheading 847989	Used in machines that are used for surface-mounting capacitors, integrated circuits, and other semiconductor devices onto printed circuit boards	None identified	None identified	
	ex	Parts for covered articles in heading 8479	Used in industrial robots, mixing machines, and surface-mount machines used to produce printed circuit assemblies and optical media	None identified	None identified	
848071	ex	Injection and compression moulds for the manufacture of semiconductor devices	Used to mold articles for the manufacture of semiconductors	None identified	Entegris commented that injection molds used to manufacture wafer shipping products are not import sensitive.	Entegris supports inclusion of injection molds used to manufacture wafer shipping products classified under HS subheading 8480.71 in the ITA.
848110	ex	Pressure -reducing valves of a kind used for the production of semiconductor and flat panel display	Used in the production of semiconductors and flat panel displays	None identified	None identified	
848130	ex	Check (nonreturn) valves of a kind used for the production of semiconductor and flat panel display	Used in the production of semiconductors and flat panel displays	None identified	Entegris commented that PFA check valves are not import sensitive.	Entegris supports inclusion of PFA check valves classified under HS subheading 8481.30 in the ITA.
848140	ex	Safety and release valves of a kind used for the production of semiconductor and flat panel display	Used in the production of semiconductors and flat panel displays	None identified	None identified	
848180	ex	Hand operated-valves of a kind used for the production of semiconductor and flat panel display manufacturing	Used in the production of semiconductors and flat panel displays	Used in plasma physics research and nuclear accelerators	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
848190	ex	Parts of covered valves	Used in valves used to produce semiconductors, flat panel displays, and similar products	Used in valves used to produce plasma physics research machines and nuclear accelerators	None identified	
848610		Machines and apparatus for the manufacture of boules or wafers	Used to manufacture boules or wafers for use in semiconductors	None identified	None identified	
848620		Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	Used to manufacture semiconductor devices or electronic integrated circuits	None identified	None identified	
848630		Machines and apparatus for the manufacture of flat panel displays	Used to manufacture flat panel displays	None identified	None identified	
848640		Machines and apparatus specified in Note 9(C) to this Chapter	Used to manufacture semiconductor devices, electronic integrated circuits, or flat panel displays	None identified	None identified	
848690		Parts and accessories (Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in Note 9 (C) to this chapter; parts and accessories)	Used in machines that manufacture semiconductor devices, electronic integrated circuits, or flat panel displays	None identified	None identified	
850110		Motors of an output not exceeding 37.5 W ¹⁸	Used to convert electrical energy to mechanical energy in products such as fax machines	Used to convert electrical energy to mechanical energy in products such as clocks, toys, and windshield wipers	None identified	The National Electrical Manufacturers Association (NEMA) does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA because motors intended for use in ICT-related applications are also used in non-ICT applications. ¹⁹
850151		Of an output not exceeding 750 W (Other AC motors, multi-phase)	Used to convert electrical energy to mechanical energy in products such as printers, photocopiers, scanners, fax machines, and servers	Used to convert electrical energy to mechanical energy in products such as machine tools, industrial applications, and aerospace products	None identified	NEMA does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA because motors intended for use in ICT-related applications are also used in non-ICT applications.
850152		Of an output exceeding 750 W but not exceeding 75 kW ²⁰ (Other AC motors, multi-phase)	Used to convert electrical energy to mechanical energy in products such as printers, photocopiers, scanners, fax machines, and servers	Used to convert electrical energy to mechanical energy in products such as pumps, machine tools, gear reducers, and conveyors	None identified	NEMA does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA because motors intended for use in ICT-related applications are also used in non-ICT applications.
850163		Of an output exceeding 375 kVA but not	None identified	Used for distributed and	None identified	NEMA does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA

¹⁸ W is an abbreviation for watts, a unit of energy.

¹⁹ National Electrical Manufacturers Association (NEMA), written submission to the USITC, September 6, 2012. All citations to NEMA in the tables are to this submission.

²⁰ kW is an abbreviation for kilowatts, a unit of energy equal to 1,000 watts.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		exceeding 750 kVA ²¹ (AC generators (alternators))		utility-scale power generation		because motors intended for use in ICT-related applications are also used in non-ICT applications.
850164		Of an output exceeding 750 kVA (AC generators (alternators))	None identified	Used primarily for utility-scale power generation	None identified	NEMA does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA because motors intended for use in ICT-related applications are also used in non-ICT applications.
850300		Parts suitable for use solely or principally with the machines of heading 8501 or 8502	Used as components in fax machines, printers, photocopiers, scanners, and servers	Used as components in toys, clocks, pumps, machine tools, gear reducers, aerospace, and generators	None identified	NEMA does not support including electric motors and parts thereof (HS headings 8501 and 8503) in the ITA because motors intended for use in ICT-related applications are also used in non-ICT applications.
850410		Ballasts for discharge lamps or tubes	None identified	Used to regulate current flow through discharge lamps, which include fluorescent lamps and high-intensity discharge lamps	None identified	NEMA supports inclusion of this product because of its use within the Digital Addressable Lighting Interface (DALI), a unit which measures and controls lighting within a building by using two-way communication.
850421		Having a power handling capacity not exceeding 650 kVA (Liquid dielectric transformers)	None identified	Used in the electric power grid to increase or decrease voltage. These are typically small distribution transformers, such as pole-mounted transformers	None identified	NEMA does not support including electrical transformers classified under HS subheading 8504.21 in the ITA because of the lack of differentiation between transformers used in ICT and non-ICT applications.
850422		Having a power handling capacity exceeding 650kVA but not exceeding 10,000 kVA (Liquid dielectric transformers)	None identified	Used in the electric power grid to increase or decrease voltage. These are products such as larger distribution transformers and transformers at industrial sites	None identified	NEMA does not support including electrical transformers classified under HS subheading 8504.22 in the ITA because of the lack of differentiation between transformers used in ICT and non-ICT applications.
850423		Having a power handling capacity exceeding 10,000 kVA (Liquid dielectric transformers)	None identified	Used to raise the voltage of electricity at the point of generation, reduce it for distribution, or raise or lower it to match the voltage in a transmission system to which it is connecting	None identified	NEMA does not support including electrical transformers classified under HS subheading 8504.23 in the ITA because of the lack of differentiation between transformers used in ICT and non-ICT applications.
850431		Having a power handling capacity not exceeding 1 kVA (Other transformers)	Used in telecommunications equipment	Used in lighting, industrial, and commercial applications,	None identified	NEMA does not support including electrical transformers classified under HS subheading 8504.31 in the

²¹ kVA is an abbreviation for kilovolt-amperes, a unit of electrical power equal to 1,000 volt-amperes.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				including consumer goods in the home. Also used in control panels, conveyor systems, machine tooling equipment, commercial sewing machines, pumping system panels, and commercial air conditioning		ITA because of the lack of differentiation between transformers used in ICT and non-ICT applications.
850432	ex	Transformers having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA for telecommunications equipment	Used in telecommunications equipment and consumer goods such as computers, laptops, televisions, and mobile phones	Used in lighting, international voltage adaptors, industrial, and commercial applications, including consumer goods in the home	None identified	
850433	ex	Transformers having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA for telecommunications equipment	Used in telecommunications equipment, computers, laptops, televisions, and mobile phones	Used for a variety of lighting, industrial, and commercial applications	None identified	
850440		Static converters	Used as power supplies for computers, printers, cell phones, and telecommunications equipment	Used in products such as electric motors, inverters in the electric grid, battery chargers, and other power supplies	None identified	NEMA supports inclusion of this product in the ITA because it assists in providing uninterruptable power to ICT systems and because the power conversion is performed with semiconductor switching devices.
850450		Other Inductors	Used in power supplies for computers, printers, cell phones, and telecommunications equipment	Used in power supplies of all electric equipment; used in power grids	None identified	NEMA supports inclusion of this product in the ITA because it assists in providing uninterruptable power to ICT systems and because the power conversion is performed with semiconductor switching devices.
850490		Parts of power supplies for automatic data processing machines or units thereof of heading 8471; of power supplies for goods of subheading 8443.31 or 8443.32; of power supplies for monitors of subheading 8528.41 or 8528.51 or projectors of subheading 8528.61. ²²	Used in power supplies for computers, printers, monitors, cell phones, and telecommunications equipment	None identified	None identified	
	ex	Parts for transformers for telecommunications equipment, static converters and inductors	Used as parts for transformers in telecommunications equipment, static converters, and inductors	Used as transformers for lighting, industrial, and commercial applications, power supplies, and electric equipment	None identified	
850511		Of metal (Permanent magnets and articles intended to become permanent magnets after magnetization)	Used in audio products, cell phones, computers, consumer electronics, microphones, radar, and	Used in motors, generators, alternators, medical devices, actuators, inverters, and	None identified	

²² This description provided in USTR's draft list differs from the 6-digit subheading 8504.90, but was not indicated as an ex-out. The description is limited to only a subset of the official HS 6-digit description. The examples of ICT and non-ICT uses for this product reflect USTR's proposed product description as given.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			traveling wave tube amplifiers	magnetic bearings		
850519		Other than of metal (Permanent magnets and articles intended to become permanent magnets after magnetisation)	Used in audio systems, televisions, computer monitors, hard disks drives for computers, microphones, and radar	Used in decorative magnets, magnetic car and safety signs, direct mail promotional items, advertising signs, toys, and games	None identified	
850520		Electromagnetic couplings, clutches and brakes	Used in printers, magnetic card readers, and medical devices	Used in machine tools, motors, industrial applications, and wind turbines	None identified	
850590	ex	Electromagnets and permanent magnets designed for magnetic resonance imaging apparatus	Used in magnetic resonance imaging (MRI) machines	None identified	None identified	
850610		Manganese dioxide (Primary cells and primary batteries)	Used to provide power to computers, portable GPS units, digital camera, and personal digital assistants (PDAs)	Used to provide power to consumer goods, such as flashlights, clocks, and calculators	None identified	NEMA supports inclusion of this product in the ITA.
850650		Lithium (Primary cells and primary batteries)	Used to provide power to computers, laptops, handheld devices, and PDAs	Used to provide power to pacemakers, clocks, and thermometers	None identified	NEMA supports inclusion of this product in the ITA.
850720	ex	Other lead-acid storage batteries, excluding those used in motor vehicles	Used to provide back-up power for networking equipment and computer systems	Used to provide power to alarm consoles, battery backup systems, emergency lights, exit signs, and uninterruptable power supplies	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.20 and for all goods covered by the ITA.
	ex	Lead-acid accumulators for use in goods classified in 85.17	Used to provide back-up power for networking equipment and computer systems	Used to provide power to alarm consoles, battery backup systems, emergency lights, exit signs, and uninterruptable power supplies	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.20 and for all goods covered by the ITA.
850730	ex	Nickel-cadmium storage batteries, excluding those used in motor vehicles	Used to provide power to wireless phones, computers, and laptops	Used to provide power to solar-powered outdoor lights, and power tools, for example	The Portable Rechargeable Battery Association (PRBA) commented that this product is not import sensitive. ²³ Intel commented that this product is not import sensitive.	PRBA supports inclusion of all rechargeable cells and batteries classified under HS subheading 8507.30 in the ITA to reduce costs associated with trade in these goods and to boost U.S. export competitiveness. Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.30 and for all goods covered by the ITA..

²³ The Portable Rechargeable Battery Association (PRBA), written submission to the USITC, September 10, 2012. All citations to PRBA in the tables are to this submission.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
						NEMA supports elimination of U.S. tariffs on this product.
850740	ex	Nickel-iron electric storage batteries, excluding those used in motor vehicles	Used to provide backup power source for networking equipment and computer systems	Used to store power for solar and wind systems and for any other purpose requiring long-term application of a large battery	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.40 and for all goods covered by the ITA. NEMA supports elimination of U.S. tariffs on this product.
850780		Other accumulators	Used to provide power to computers, handheld devices, mobile phones, PDAs, networking equipment, and backup systems	Used to provide power for a range of products, from mechanized vehicles to solar power to calculators, watches and cameras	Both Intel and PRBA commented that this product is not import sensitive.	PRBA supports inclusion of all rechargeable cells and batteries classified under HS subheading 8507.80, including lithium-ion and nickel-metal hydride storage batteries, in the ITA to reduce costs associated with trade in these goods and to boost U.S. export competitiveness. Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.80 and for all goods covered by the ITA.
	ex	Other storage batteries excluding those used in motor vehicles	Used to provide power to computers, handheld devices, mobile phones, PDAs, networking equipment and backup systems	Used to provide power for a range of products, from mechanized vehicles, to solar power, calculators, watches and cameras	Both Intel and PRBA commented that this product is not import sensitive.	PRBA supports inclusion of all rechargeable cells and batteries classified under HS subheading 8507.80, including lithium-ion and nickel-metal hydride storage batteries, in the ITA to reduce costs associated with trade in these goods and to boost U.S. export competitiveness. Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.80 and for all goods covered by the ITA.
	ex	Lithium-ion accumulators for use in goods classified in 85.17	Used to provide power to wireless telephones and other data devices	None identified	Both Intel and PRBA commented that this product is not import sensitive.	PRBA supports inclusion of all rechargeable cells and batteries classified under HS subheading 8507.80, including lithium-ion and nickel-metal hydride storage batteries, in the ITA to reduce costs associated with trade in these goods and to boost U.S. export competitiveness. Intel supports inclusion in the ITA of electric storage batteries classified under HS subheading 8507.80 and for all goods covered by the ITA.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
						As of 2012, lithium-ion batteries are classified in HS subheading 8507.60.
850790	ex	Parts, excluding parts used in batteries for use in motor vehicles	Used as components in the manufacture of batteries to power products, such as computers, cell phones, and digital cameras	Used as components in the manufacture of batteries to power products, such as flashlights, clocks, and watches	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of parts for electric storage batteries classified under HS subheading 8507.90 and for all goods covered by the ITA.
851310	ex	Lamps using a LED light module as primary light source	None identified	Used in portable or handheld lamps, such as flashlights	None identified	
851390	ex	Parts for lamps using a LED light module as primary light source	None identified	Used in portable or handheld lamps, such as flashlights	None identified	
851430	ex	Solder ovens of a kind used for the production of printed circuits or printed circuit assemblies	Used in the production of printed circuit boards	None identified	Intel commented that this product is not import sensitive.	Intel supports inclusion of furnaces and ovens classified under HS subheading 8514.30 and used for production of IT products in the ITA. Intel also requests a new ex-out for "Other furnaces and ovens of a kind used for the production of printed circuit boards or printed circuit assemblies."
	ex	Five stage convection ovens of a kind used for the production of printed circuits	Used in the production of printed circuit boards	None identified	Intel commented that this product is not import sensitive.	Intel supports inclusion of furnaces and ovens classified under HS subheading 8514.30 and used for production of IT products in the ITA. Intel also requests a new ex-out for "Other furnaces and ovens of a kind used for the production of printed circuit boards or printed circuit assemblies."
851440	ex	Other equipment for the heat treatment of materials by induction or dielectric loss for the purpose of semiconductor manufacturing	Used in the production of semiconductors	None identified	None identified	
851490	ex	Parts for furnaces and ovens of a kind used for the production of printed circuits or printed circuit assemblies	Used in the production of printed circuit boards or printed circuit assemblies	None identified	None identified	
851519	ex	Other waver soldering machines for the manufacture of printed circuits and printed circuit assemblies	Used in soldering and the manufacture of printed circuits or printed circuit assemblies	None identified	None identified	
851590	ex	Parts for covered articles in 8515.	Parts of machines used in soldering in the manufacture of printed circuits or printed circuit assemblies	None identified	None identified	
851650	ex	Microwave ovens which have apparatus for communication in wired or wireless network	None identified	Used to cook and reheat food	None identified	Contains feature enabling communication with a wired or wireless network.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
851660	ex	Electric ovens, other than microwave ovens which have apparatus for communication in wired or wireless network; cookers, cooking plates, boiling rings, grillers and roasters which have apparatus for communication in wired or wireless network	None identified	Used to cook and reheat food	None identified	Contains feature enabling communication with a wired or wireless network.
851679	ex	Electro-thermic appliances of a kind used for domestic purposes which have apparatus for communication in wired or wireless network (other than those of subheadings 8516.10 to 8516.72)	None identified	Used to dry hands, dry hair, and heat rooms	None identified	Contains feature enabling communication with a wired or wireless network.
851761		Base stations	Used to transmit and/or receive voice or data over wired or wireless networks	None identified	None identified	
851762		Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus.	Used to transmit and/or receive voice or data over wired or wireless networks	None identified	None identified	
851769		Other (Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network)).	Used to transmit and/or receive voice or data over wired or wireless networks	None identified	None identified	
	ex	Other voices, images or data reception apparatus for radiotelephony or radiotelegraphy	Used to transmit and/or receive voice or data over wired or wireless networks	None identified	None identified	
851770		Parts (Telephone sets, including telephones for cellular networks or for other wireless networks; Parts of other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network), other than transmission or reception apparatus of headings 84.43, 85.25, 85.27 or 85.28)	Used in wireless communication devices and telecommunications network equipment, such as cell phones, switches, and routers	None identified	None identified	
851810		Microphones and stands therefore	Used to convert sound to electrical signals	None identified	None identified	
	ex	Microphones condenser, with a diameter of not exceeding 15 mm and wireless microphones, including transmission apparatus	Used to convert sound to electrical signals	None identified	None identified	
	ex	Microphones and stands therefore	Used to convert sound to electrical signals	None identified	None identified	
851821		Single loudspeakers, mounted in their enclosures	Used to convert electrical signals to sound	None identified	None identified	
851822		Multiple loudspeakers, mounted in the same enclosure	Used to convert electrical signals to sound	None identified	None identified	
851829		Other (Loudspeakers, whether or not mounted in their enclosures)	Used to convert electrical signals to sound	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
	ex	Loudspeakers, whether or not mounted in their enclosures, other	Used to convert electrical signals to sound	None identified	None identified	
851830		Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	Used to receive and amplify sound from an electronic device, including phones and music playing devices	None identified	None identified	
	ex	Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	Used to receive and amplify sound from an electronic device, including phones and music playing devices	None identified	None identified	
	ex	Wireless handsets for telephonic apparatus	Used for telephone communication	None identified	None identified	
	ex	Other wireless combined microphone / speaker sets	Used to receive and amplify sound from an electronic device, including phones and music playing devices	None identified	None identified	
851840		Audio-frequency electric amplifiers	Used to amplify sound	None identified	None identified	
851850		Electric sound amplifier sets	Used to amplify sound	None identified	None identified	
851890		Parts (Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets.)	Used in or with telephone handsets, microphones, earphones, and amplifiers	None identified	None identified	
851920		Apparatus operated by coins, banknotes, bank cards, tokens or by other means of payment	Used to record and/or play back sound	None identified	None identified	
851930		Turntables (record-decks)	Used to play back sound recorded on phonograph records	None identified	None identified	
851981		Using magnetic, optical or semiconductor media (Sound recording or reproducing apparatus- Other apparatus)	Used to record and/or play back sound recorded on magnetic, optical, or semiconductor media, including CD players and digital music players	None identified	None identified	
851989		Other (Sound recording or reproducing apparatus)	Used to record and/or play back sound, such as record players	None identified	None identified	
852110		Magnetic tape-type	Used to record and/or play back video recorded on magnetic tape	None identified	None identified	
852190		Other (Video recording or reproducing apparatus, whether or not incorporating a video tuner)	Used to record and/or play back video recorded on optical or digital media	None identified	None identified	
852210		Pick-up cartridges	Used in a record player/turntable	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
852290		Other (Parts and accessories suitable for use solely or principally with the apparatus of headings 85.19 to 85.21)	Used in answering machines, recording devices, sound- or video-reproducing apparatus, and electronic surveillance equipment	None identified	None identified	
	ex	Other, including multi-component Integrated circuits incorporated as a part of electronic surveillance equipment, but excluding cabinets and cases of wood	Used in answering machines, recording devices, sound- or video-reproducing apparatus, and electronic surveillance equipment	None identified	None identified	
852321		Cards incorporating a magnetic stripe	Used to access and store digital data, including gift cards and credit cards	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
	ex	Cards incorporating a magnetic stripe, use for recording data or programs in code form for automatic data processing machines, whether or not recorded.	Used to access and store digital data, including gift cards and credit cards	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852329		Other (Magnetic media)	Used for recording or storing sound, images, or other information on discs, tapes, and solid-state non-volatile storage devices	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852340		Optical media	Used to record or store binary data on flat surfaces, such as CDs or DVDs	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852351		Solid-state non-volatile storage devices	Used to record or store sound, images or other information on an integrated circuit, such as "thumb" drives, memory sticks, and flash drives	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852352		Smart cards	Used to provide authentication, data storage, and application processing, including for paying bills and using automated teller machines (ATMs), mobile phones, and public transit applications	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852359		Other (Semiconductor media)	Used to record or store sound, images or other information on an integrated circuit	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852380		Other (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded,	Used to record and store sound, images, or other information	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		including matrices and masters for the production of discs, but excluding products of Chapter 37.)				
	ex	Other, other than acetate discs for record players (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	Used to record and store data and sound	None identified	ESA commented that this product is not import sensitive.	ESA supports inclusion of all products under HS heading 8523 in the ITA, including all entertainment software.
852550		Transmission apparatus	Used to receive, convert, and transmit radio or television communications signals, includes set top boxes	None identified	None identified	
852560		Transmission apparatus incorporating reception apparatus	Used to transmit wireless radio frequency signals and enable two-way communication, includes citizen band radios and walkie talkies	None identified	None identified	
852580		Television cameras, digital cameras and video camera recorders	Used to capture still or motion video images	None identified	None identified	Stryker Corporation (Stryker) supports inclusion of this product in the ITA. ²⁴
852610		Radar apparatus	Used to relay information about detected objects by measuring distance between radio wave pulses transmitted and received	None identified	None identified	
852691		Radio navigational aid apparatus	Used to provide spatial information by transmitting and receiving radio signals from global positioning satellites (GPS)	None identified	None identified	
852692		Radio remote control apparatus	Uses radio frequency signals to communicate with and control various electric or electronic systems	None identified	None identified	
852712		Pocket-size radio cassette-players	Used to receive radio broadcasts and convert the signal to sound and to play back sound prerecorded on audiocassettes	None identified	None identified	
852713		Other apparatus combined with sound recording or reproducing apparatus	Used to receive radio broadcasts and convert the signal to sound and to record and/or play back sound	None identified	None identified	

²⁴ Stryker Corporation, submission to the USITC, September 6, 2012. All citations to Stryker in the tables are to this submission.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
852719		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	Used to receive radio broadcasts and convert the signal to sound	None identified	None identified	
852721		Other radio-broadcast receivers capable of operating without an external source of power	Used to receive radio broadcasts and convert the signal to sound and to play back prerecorded sound	None identified	None identified	
852729		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	Used to receive radio broadcasts and convert the signal to sound	None identified	None identified	
852791		Combined with sound recording or reproducing apparatus	Used to receive radio broadcasts and convert the signal to sound and to play back prerecorded sound	None identified	None identified	
852792		Not combined with sound recording or reproducing apparatus but combined with a clock	Used to receive radio broadcasts and convert the signal to sound and to show the time of day	None identified	None identified	
852799		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	Used to transmit or receive audio or visual signals over radio frequency, including baby monitoring systems	None identified	None identified	
852849		Other (Cathode-ray tube monitors)	Used to display direct-view video images	None identified	None identified	
852859		Other (Other monitors)	Used to display direct-view video images	None identified	None identified	
	ex	Monitors, not incorporating television reception apparatus with a diagonal size of 24 inches or less (excl with cathode ray tube and those of a kind solely or principally used in an automatic data-processing machine of heading 8471)	Used to display direct-view video images	None identified	None identified	
852869		Other (Projectors)	Used to project video images onto a reflective surface	None identified	None identified	
852871		Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, not designed to incorporate a video display or screen	Used to receive broadcast color television signals but not designed to incorporate a video display, such as a set-top box	None identified	None identified	
852872		Other, colour (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	Used to receive and display television broadcast signals or video images in color, such as a color television set	None identified	None identified	
	ex	Reception apparatus for television, colour, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to	Used to receive and display television broadcast signals or video images in color, such as a color television set	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		incorporate a video display or screen with a diagonal size of 24 inches or less				
852873		Other, black and white or other monochrome (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	Used to receive and display television broadcast signals or video images in monochrome, such as a black-and-white television set	None identified	None identified	
	ex	Reception apparatus for television, black and white or other monochrome, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	Used to receive and display television broadcast signals or video images in monochrome, such as a black-and-white television set	None identified	None identified	
852910		Aerials and aerial reflectors of all kinds; parts suitable for use therewith	Used with televisions, radios, radar, navigational aids, and remote control devices to facilitate signal reception	None identified	None identified	
	ex	Other aerials and aerial reflectors of a kind used with transmission apparatus for radio-broadcasting or television	Used with televisions and radios to facilitate signal reception	None identified	None identified	
852990		Other (Parts suitable for use solely or principally with the apparatus of headings 85.25 to 85.28.)	Used in transmission apparatus for televisions, radios, camcorders, digital cameras, and GPS devices	None identified	None identified	
	ex	Other, including multi-component integrated circuits incorporated as a part of set-top box, but excluding cabinets and cases of wood	Used in set-top boxes, transmission apparatus for televisions, radios, camcorders, digital cameras, and GPS devices	None identified	None identified	
853010		Equipment for railways or tramways (Electrical signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	Used to transmit and display signals, data, and other information	Used to provide visual or sound signals, includes railway lighting	None identified	NEMA supports inclusion of intelligent transportation system (ITS) technologies and parts classified under HS subheadings 8530.10, 8530.80, and 8530.90 in the ITA.
853080		Other equipment (Electrical signalling, safety or traffic control equipment for roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	Used to transmit and display signals, data, and other information; includes roadway monitoring camera systems	Used to provide traffic direction signals, includes light wands, flashing roadway warning lights, and street lamps	None identified	NEMA supports inclusion of ITS technologies and parts classified under HS subheadings 8530.10, 8530.80, and 8530.90 in the ITA.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
853090		Parts (Electrical signalling, safety or traffic control equipment which is controlled with automatic data processing machines (other than those heading 86.08) ²⁵	Used in computerized devices that transmit and display signaling data	None identified	None identified	NEMA supports inclusion of ITS technologies and parts classified under HS subheadings 8530.10, 8530.80, and 8530.90 in the ITA.
853180		Other apparatus (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30.)	Used to digitally display information and send wireless signals	Used to detect status or problems through sound or visual signals and/or to alert concerned parties; includes metal detectors, alarms, smoke detectors, horns, reflective visibility gear, and security tags	None identified	
	ex	CRT indicator panels and displays	Used to digitally display information	None identified	None identified	
853190		Parts (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30)	Used as printed circuit assemblies and other parts for indicator panels or other wireless signaling devices	Used as parts of security tags, burglar alarms, fire alarms, and smoke detectors	None identified	
	ex	Parts of Electric sound or visual signalling apparatus, other than those of heading 85.12 or 85.30. (excluding for burglar or fire alarms and similar apparatus)	Used as printed circuit assemblies and other parts for indicator panels or other wireless signaling devices	Used as parts of security tags, sirens, and horns	None identified	
853540		Lightning arresters, voltage limiters and surge suppressors	None identified	Used to stop electrical surges in products or at facilities that use electricity	None identified	NEMA supports the inclusion of these products in the ITA.
853590		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes), for a voltage exceeding 1,000 volts.)	None identified	Used to switch or protect circuits such as electric motors, production facilities, and electric power distribution networks	None identified	NEMA supports the inclusion of these products in the ITA.
853610		Fuses	Used in computer motherboards and semiconductor devices	Used to physically break a circuit in response to excessive electrical current and thereby protect products or production facilities that use electricity	None identified	NEMA supports the inclusion of fuses for non-automotive uses classified under HS subheading 8536.10 in the ITA.
853620		Automatic circuit breakers	None identified	Used to break or interrupt electrical circuits in buildings, equipment, electric power networks, and so forth; unlike fuses,	None identified	NEMA supports the inclusion of this product in the ITA.

²⁵ This description provided in USTR's draft list differs from the 6-digit subheading 8530.90, but was not indicated as an ex-out. The description includes the language, "which is controlled with automatic data processing machines," which is not found in the official HS description. The examples of ICT and non-ICT uses for this product reflect USTR's proposed product description as given.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				these can be reset as opposed to replaced		
853630		Other apparatus for protecting electrical circuits	None identified	Used to switch or protect circuits and thus protect equipment that uses the circuits, such as electric motors, production facilities, and electric power distribution networks	None identified	NEMA supports the inclusion of this product in the ITA.
	ex	Power strips and surge protectors	None identified	Used to provide multiple plugs for electricity for products; these devices may incorporate protection from surges in electricity	None identified	NEMA supports the inclusion of this product in the ITA.
853641		For a voltage not exceeding 60 V (Relays)	None identified	Used to switch or protect electrical circuits in electric motors, production facilities, and electric power distribution networks	None identified	
	ex	Electrical relays for a voltage not exceeding 60v designed for industrial automation applications	None identified	Used to switch or protect electrical circuits in industrial automation applications	None identified	NEMA supports the inclusion of this product in the ITA.
853649		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	None identified	Used to switch or protect electrical circuits; incorporated in circuits used in buildings, equipment, or electric power networks	None identified	
	ex	Other relays designed for industrial automation applications	None identified	Used to switch or protect electrical circuits in industrial automation applications	None identified	NEMA supports the inclusion of this product in the ITA.
853650		Other switches	Used to switch or protect circuits in computer processors	Used to switch or protect electrical circuits; such switches include starter motors, light switches, and switches for equipment, machinery, consumer goods, and motor vehicles	None identified	
853661		lamp-holder	None identified	Used to connect a lamp to an electrical circuit and provide physical support for the lamp; commonly	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				found in residential and commercial buildings		
853669		Other (lamp-holders, plugs, and sockets)	Connectors used to make electrical connections between printed circuit boards and between coaxial cables used in telecommunications	Used to make electrical connections for industrial and consumer products powered by electricity	None identified	
853670		Connectors for optical fibres, optical fibre bundles or cables	Used to connect optical fibers, fiber cable bundles, or cables to facilitate the flow of telecommunication signals	None identified	None identified	
853690		Other apparatus (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	Used as the connection device between a wire and plug; includes wafer probing devices that are used in testing semiconductors	Used to make electrical connections and house electrical apparatus; commonly found in commercial and industrial buildings	Intel commented that this product is not import sensitive.	Intel supports the inclusion of wafer probing plates, probe cards, prober docking hardware, prober docking manipulator, or other items used to test semiconductor wafers classified under HS subheading 8536.90 in the ITA.
	ex	Wafer probing plates, probe cards, prober docking hardware, prober docking manipulator, or other items designed for testing semiconductor wafers	Used to test semiconductor wafers	None identified	Intel commented that this product is not import sensitive.	Intel supports the inclusion of this product in the ITA.
853710		For a voltage not exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	Used to automate electromechanical processes, such as semiconductor testing; includes programmable controllers, which are industrial data processing machines, and motor control centers	Used as parts in industrial automation and process control, machine tools and other production machinery, and power distribution networks; products include programmable controllers (i.e., computers), numerical controls for machinery, and switchgear assemblies and switchboards	Intel commented that this product is not import sensitive.	Intel supports the inclusion of this product in the ITA. NEMA supports the inclusion of programmable logic controllers (PLC's) and motor control centers classified under HS subheading 8537.10 in the ITA.
853720		For a voltage exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	None identified	Used to control electricity in power distribution networks and to equipment	None identified	
853810		Boards, panels, consoles, desks, cabinets and other bases for the goods of heading 85.37, not equipped with their apparatus	None identified	Used to house controls, switchgear, and industrial and process control equipment for industrial	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				and commercial uses		
853890		Other (Parts suitable for use solely or principally with the apparatus of heading 85.35, 85.36 or 85.37.)	Used as printed circuit assemblies; used in programmable controllers and motor control centers	Used in certain electrical apparatus and its housing	None identified	NEMA supports the inclusion of parts for PLC's and motor control centers classified under HS subheading 8538.90 in the ITA.
	ex	Parts for items in 8536 and 8537, specifically printed circuit assemblies, molded parts, other parts of switchgear, switchboards, panel boards and distribution boards and adaptors of heading 8537	Used as printed circuit assemblies; used in programmable controllers and motor control centers	Used in certain electrical apparatus and its housing	None identified	
853939	ex	Cool cathode lamp for the manufacture of flat panel displays	Used in certain LCD television screens, notebook computer displays, copiers, and cellular phones	None identified	None identified	
853949		Other (Ultra-violet or infra-red lamps; arc-lamps)	Used in semiconductor, flat panel display, and camera production	Used for disinfection, laboratory research, heating, paint drying, evaporation of moisture, and food warming	None identified	
854011		Colour (Cathode-ray television picture tubes, including video monitor cathode-ray tubes)	Used to display color video images in direct-view television receivers and video monitors	None identified	None identified	
854012		Black and white or other monochrome (cathode-ray television picture tubes, including video monitor cathode-ray tubes)	Used to display black and white or other monochrome video images in direct-view television receivers and video monitors; also used to display color video images in projection television receivers and projection video monitors using three separate monochrome tubes	None identified	None identified	
854020		Television camera tubes; image converters and intensifiers; other photo-cathode tubes	Used to capture video images or to intensify light	None identified	None identified	
	ex	Television camera tubes; image converters and intensifiers; other photo-cathode tubes, for use with articles of headings 85.25	Used to capture video images or to intensify light	None identified	None identified	
854040		Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm	Used to display graphic information or data in color	None identified	None identified	
	ex	Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm, for use with articles of headings 85.25	Used to display graphic information or data in color	None identified	None identified	
854050		Data/graphic display tubes, black and white or other monochrome	Used to display graphic information or data in monochrome	None identified	None identified	
	ex	Data/graphic display tubes, black and white or other monochrome, for use with articles of	Used to display graphic information or data in	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		headings 85.25	monochrome			
854060		Other cathode-ray tubes	Used to display graphic information or data	None identified	None identified	
	ex	Other cathode-ray tubes, for use with articles of headings 85.25	Used to display graphic information or data	None identified	None identified	
854071		Magnetrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	Used to generate microwaves in radar and communications equipment	Used to generate microwaves in an oven	None identified	
	ex	Magnetrons, for use with articles of headings 85.25	Used to generate microwaves in transmission and reception equipment	None identified	None identified	
854072		Klystrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	Used to generate microwaves; found in radar, satellite, and communications systems, including television broadcasting	None identified	None identified	As of 2012, these products are classified in HS subheading 8540.79.
854079		Other (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	Used to generate microwaves in high-frequency radio communications and radar equipment	None identified	None identified	
	ex	Other microwave tubes, for use with articles of headings 85.25	Used to generate microwaves in high-frequency radio communications and radar equipment	None identified	None identified	
854081		Receiver or amplifier valves and tubes	Used to receive or amplify radio waves in telecommunications equipment	None identified	None identified	
	ex	Receiver or amplifier valves and tubes, for use with articles of headings 85.25	Used to receive or amplify radio waves in telecommunications equipment	None identified	None identified	
854089		Other (Other valves and tubes)	Used to control electric current in a vacuum or gas-filled tube; used in telecommunications equipment	None identified	None identified	
854091		Of cathode-ray tubes (Parts)	Used in a CRT used in video displays	None identified	None identified	
854099		Other (Parts of Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	Used in electron tubes for radar, satellite, and communications systems, including television broadcasting	Used in microwave tubes for microwave ovens	None identified	
	ex	Parts of valves and tubes, other than cathode-ray, for use with articles of headings 85.25	Used in electron tubes for telecommunications equipment and measuring	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			and testing equipment			
854231		Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (Electronic integrated circuits)	Used in processing data or signals or controlling functions as individual semiconductors or semiconductors combined with other electronic devices	None identified	Intel commented that this product is not import sensitive.	Intel supports the inclusion of multichip integrated circuits (MCPs) classified under HS heading 8542 in the ITA.
854232		Memories (Electronic integrated circuits)	Used to store programs and data in computers and other digital devices such as mobile phones and digital calculators	None identified	Intel commented that this product is not import sensitive.	Intel supports the inclusion of multichip integrated circuits (MCPs) classified under HS heading 8542 in the ITA.
854233		Amplifiers (Electric integrated circuits)	Used to increase power of electric signals	Used to enhance sounds in guitars and other musical instruments	Intel commented that this product is not import sensitive.	Intel supports the inclusion of multichip integrated circuits (MCPs) classified under HS heading 8542 in the ITA.
854239		Other (Electronic integrated circuits)	Used to amplify, filter, demodulate, mix, and form connections between semiconductors in computers and mobile phones	Used in digital home appliances such as vacuum cleaners and ice makers	Intel commented that this product is not import sensitive.	Intel supports the inclusion of multichip integrated circuits (MCPs) classified under HS heading 8542 in the ITA.
854310		Particle accelerators	Used in television CRTs and ion-implanting devices	Used in oncological treatments, condensed matter physics and particle physics colliders	None identified	
854320		Signal generators	Used in testing and measuring equipment	Used to modulate and amplify musical acoustics	None identified	
854330	ex	Electroplating and electrolysis machines for applying various metals to printed circuits and printed circuit assemblies	Used to manufacture printed circuits, electrical contacts, and microcircuits	Used in industrial chemicals, refining, and electroplating of metals	None identified	
854370		Other machines and apparatus (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	Used for electrical nerve stimulation, used as electronic dictionaries and translation devices, and used as flat panel displays	Used to amplify sounds and in other special-effects equipment	None identified	
	ex	Articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks	Used with telecommunications networks and devices	None identified	None identified	
	ex	Microwave amplifiers	Used to strengthen transmission of information in radiotelephony and radiotelegraphy	None identified	None identified	
854390		Parts (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	Used in flight data recorders, electroplating machines, microwave amplifiers, and signal generators	Used in parts for electric fence energizers, aircraft demisters, and special effects pedals for musical instruments	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
	ex	Parts of signal generators; electroplating and electrolysis machines for copper to printed circuits and printed circuit substrates; articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks; microwave amplifiers; and electrical machines with translation or dictionary functions. Printed circuit assemblies for parts of equipment in 8543	Used to carry information and power in telecommunications networks, microwave amplifiers, and electronic translation or dictionary devices	None identified	None identified	
854411		Of copper (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	Used as winding wire for actuators in hard disk drives and similar products	Used in the manufacture of electric motors, generators, transformers, household appliances, and electrical hand tools; also used for basic transmission of electricity	None identified	NEMA commented that this product only belongs in the ITA to the extent that it has specific ICT applications.
854419		Other (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	None identified	Used in the manufacture of electric motors, generators, transformers, household appliances, and electrical hand tools; also used for basic transmission of electricity	None identified	NEMA commented that this product only belongs in the ITA to the extent that it has specific ICT applications.
854420		Coaxial cable and other coaxial electric conductors	Used as a transmission line for radio frequency signals, computer network (Internet) connections, feedlines connecting radio transmitters and receivers with their antennas, and distributing cable television signals	None identified	Alcatel-Lucent commented that this product is not import sensitive.	Alcatel-Lucent commented that coaxial cable has no significant uses outside of ICT uses. NEMA supports inclusion of this product in the ITA.
854442		Fitted with connectors (Other electric conductors, for a voltage not exceeding 1,000 V)	Used in data and signal transmission (i.e. via cables) for telephones, computers, printers, other computer peripherals, set top boxes and similar devices connected to a network; used to transmit electricity (i.e. via universal serial bus (USB) cables) for computers, computer peripherals and similar devices	Used in specialty cables connecting other machines such as muscle stimulators	None identified	NEMA supports inclusion of this product in the ITA.
854449		Other (Other electric conductors, for a voltage not exceeding 1,000 V)	Used in data and signal transmission (i.e. cables without connectors) for telephones, computers, set top boxes and similar	None identified	None identified	NEMA supports inclusion of this product in the ITA.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			devices connected to a network; used to transmit electricity (i.e. via USB cables) and to charge wireless cell phones, music players, and similar devices			
854460		Other electric conductors, for a voltage exceeding 1,000 V (Other electric conductors, for a voltage not exceeding 1,000 V)	None identified	Used in transmission of power or connecting electricity, including industrial power cables for power transmission	None identified	NEMA does not support inclusion of this product in the ITA because it is high voltage and not applicable to ICT functions.
854519		Other (Electrodes) (Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon, with or without metal, of a kind used for electrical purposes.)	Used in LCDs	Used in applications such as electrolysis and carbon electrodes for carbon arc welding	None identified	
854590	ex	Other carbon, with or without metal, of a kind used for electrical purpose (excluding carbons rod, electrodes, brushes)	Used in microphones, battery carbons for batteries used in products such as laptops and PDAs, and as coatings in electronics	Used in lamps, heating pads, and battery carbons for batteries used in products such as flashlights, clocks, and calculators	None identified	
854710	ex	Insulated fittings of ceramics for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Used in the manufacture of semiconductors, integrated circuits, and flat panel displays	None identified	None identified	
854790	ex	Quartz or fused silica insulated fittings for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Used in semiconductor manufacturing, electronic circuits, or flat panel displays	None identified	None identified	
880260	ex	Communications satellites	Used to transmit telecommunications signals	None identified	None identified	
880390	ex	Parts of communications satellites	Used in communications satellites	None identified	None identified	
900110		Optical fibres, optical fibre bundles and cables	Used to transmit voice, data, images, and video through light waves	Used as lasers and to provide illumination, including decorative, commercial, and industrial lighting	An industry representative reports that this product is import sensitive because it is manufactured domestically. The representative also stated that major U.S. export markets might not reciprocally lower their barriers to this product, even if it were included in the ITA expansion. ²⁶	
900120		Sheets and plates of polarising material	Used in the manufacturing of semiconductors, LEDs for display panels, application processors for mobile	Used in the manufacture of sunglasses	None identified	

²⁶ Industry representative, telephone interview by USITC staff, October 3, 2012.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			phones and tablets, and LCDs			
900190		Other (Optical fibres and optical fibre bundles; optical fibre cables other than those of heading 85.44; sheets and plates of polarising material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked.)	Used for optical components of telecommunications products such as flat panel displays and LCDs	Used for manufacturing lenses, prisms, and mirrors	None identified	
	ex	Optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, lithography equipment, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof (wherever classified), or telecommunications equipment or parts or accessories of any of the foregoing	Used for the manufacture of semiconductors, computers, telecommunications products, flat panel displays, and LCDs	None identified	None identified	
	ex	Optical films cut to shape and size for the manufacture of LCD / LED displays and screens	Used for the manufacture of flat panel displays and LCDs	None identified	None identified	
900211		For cameras, projectors or photographic enlargers or reducers (Objective lenses)	Used in lenses for digital projectors or compact disc players	Used in film camera lenses and slide projectors	None identified	
900219		Other (Objective lenses)	Used as lenses for wafer steppers; used for the projection of a circuit pattern onto a treated wafer surface; used in semiconductor manufacturing	Used in film camera lenses	None identified	
900220		Filters (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	Used in semiconductor manufacturing	Used as an accessory for film cameras	None identified	
900290		Other (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	Used for integrated circuits, microchip manufacturing, and consumer electronic equipment	None identified	None identified	
900661		Discharge lamp ("electronic") flashlight apparatus	None identified	Used to illuminate camera subjects	None identified	
900669		Other (Parts and accessories) (Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 85.39.)	None identified	Used to illuminate camera subjects	None identified	
900820		Microfilm, microfiche or other microform readers, whether or not capable of producing copies	None identified	Used to read information recorded on microfilm, microfiche, or other	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				microform media		
900830		Other image projectors	Used to project semiconductor and printed circuit board patterns	Used to project images	None identified	
900840		Photographic (other than cinematographic) enlargers and reducers	Used to enlarge or reduce semiconductor and printed circuit patterns	Used to make photographic prints from negatives	None identified	
900890		Parts and accessories (Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers.)	Used in or with devices to enlarge or reduce semiconductor and printed circuit patterns	Used in or with photographic enlargers, reducers, and image projectors	None identified	
901050		Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes	Used to develop semiconductor and printed circuit patterns; used in enlargers and reducers for making printed circuit boards	Used in other apparatus and equipment for developing and handling photographic images	None identified	
901060		Projection screens	None identified	Used as a reflective surface on which images, either photographic, cinematographic, or video, are projected for direct viewing	None identified	
901090		Parts and accessories (Apparatus and equipment for photographic (including cinematographic) laboratories, not specified or included elsewhere in this Chapter; negatoscopes; projection screens.)	Used in or with devices for projecting semiconductor and printed circuit patterns and for enlargers and reducers for making printed circuit boards	Used in or with equipment for photographic (including cinematographic) laboratories, negatoscopes, and projection screens	None identified	
	ex	Parts and accessories for articles in 9010.50 and 9010.60.	Used in or with devices for projecting semiconductor and printed circuit patterns and for enlargers and reducers for making printed circuit boards	Used in or with equipment for photographic (including cinematographic) laboratories, negatoscopes, and projection screens	None identified	
901110		Stereoscopic microscopes	Used to digitally transmit, record, and display three-dimensional magnified images	None identified	None identified	
901120		Other microscopes, for photomicrography, cinephotomicrography or microprojection	Used to digitally produce enlarged optical images formed by a microscope onto a screen	Used as non-digital optical microscope	None identified	
901180		Other microscopes (Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection.)	Used to digitally produce optical images of small objects formed by a microscope onto a screen	Used as non-digital compound optical microscopes	None identified	
901190		Parts and accessories (Compound optical microscopes, including those for	Used in devices that digitally produce optical images of	Used in non-digital compound optical	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		photomicrography, cinephotomicrography or microprojection.)	small objects formed by a microscope on a screen	microscopes		
901210		Microscopes other than optical microscopes; diffraction apparatus	Used in the manufacture of semiconductors, flat panel monitors, and plasma screens and LCDs	None identified	None identified	
901290		Parts and accessories (Microscopes other than optical microscopes; diffraction apparatus.)	Used in the manufacture of semiconductors, flat panel monitors, and plasma and LCD screens; used in parts of digital optical microscopes	None identified	None identified	
901310		Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter. ²⁷	Used in semiconductor, flat panel display, and LCD manufacturing	Used for the manufacture of optical appliances and instruments	None identified	
901320		Lasers, other than laser diodes	Used in semiconductor and flat panel display manufacturing	Used in barcode scanners, surgical instruments, and fingerprint detection	None identified	
	ex	Lasers and light sources and parts thereof for the manufacture of semiconductors or flat panel displays	Used in semiconductor and flat panel display manufacturing	None identified	None identified	
901380		Other devices, appliances and instruments (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	Used in the manufacture of LCDs	Used as lasers in the production of optical appliances and instruments, such as eyeglasses, contact lenses, and binoculars	None identified	
901390		Parts and Accessories (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	Used in the manufacture of LCDs, fiber optic telecommunications networks, and flat panel displays	Used for parts of lasers for optical appliances and instruments, such as eyeglasses, contact lenses, and binoculars	None identified	
	ex	Parts and accessories for flat panel displays, liquid crystal displays, attenuator fiber optic for telecommunication networks, and laser and light sources designed for the manufacture of semiconductor or flat panel displays	Used in the manufacture of LCDs, fiber optic telecommunications networks, and flat panel displays	None identified	None identified	
901410		Direction finding compasses	Used to determine direction through electronic detection of magnetic fields	Used to determine direction using magnets or gyroscopic rotation	None identified	

²⁷ This description provided in USTR's draft list differs from the 6-digit HS subheading 9013.10. The given description reflects the language of the 4-digit heading 9013, whereas 9013.10 reads "telescopic sights for fitting to arms; periscopes; telescopes designed to form parts of machines, appliances, instruments or apparatus of this chapter or section XVI." The examples of ICT and non-ICT uses for this product reflect USTR's proposed product description as given.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
901420		Instruments and appliances for aeronautical or space navigation (other than compasses)	Used to measure physical forces through computerized electronic sensors that detect rate and direction of motion, such as altimeters, airspeed indicators, gravitational stress detectors, and inertial measurement units	Used to measure physical forces through non-electronic sensors that detect rate and direction of motion, such as altimeters, airspeed indicators, gravitational stress detectors, and inertial measurement units	None identified	
901480		Other optical navigational instruments	Used to electronically provide navigation data and to digitally display depth readings using sonar technology, including fish finders	Used to provide navigational information through non-electronic means	None identified	
	ex	Other optical navigational instruments, excluding ships' logs and depth-sounding apparatus	Used to electronically provide navigation data	Used to provide navigational information through non-electronic means	None identified	
901490		Parts and accessories (Direction finding compasses; other navigational instruments and appliances; parts and accessories thereof)	Used in or with digital compasses and other electronic navigational instruments	Used in or with non-electronic compasses and navigational instruments	None identified	
901510		Rangefinders	Used to electronically determine distance between the instrument and a given object	Used to determine distance between the instrument and a given object through non-electronic means	None identified	
901520		Theodolites and tachymeters (tacheometers)	Used to electronically measure angles in horizontal and vertical planes	Used to measure angles in horizontal and vertical planes through non-electronic means	None identified	
901530		Levels	Used to electronically measure the height of a distant point in relation to a pre-established set of water level bench marks	Used to measure the height of a distant point in relation to a pre-established set of water level bench marks through non-electronic means	None identified	
901540		Photogrammetrical surveying instruments and appliances	Used to electronically produce photographic images to determine geometric properties of objects	Used to produce photographic images to determine geometric properties of objects through non-electronic means	None identified	
901580		Other instruments and appliances	Used to electronically measure the earth's hydrological, meteorological, and geophysical activities	Used to measure the earth's hydrological, meteorological, and geophysical activities through non-electronic	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				means		
901590		Parts and accessories (Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders; parts and accessories thereof)	Used in rangefinders, theodolites and tachymeters, levels, photogrammetrical surveying, and other instruments that function through electronic means	Used in rangefinders, theodolites and tachymeters, levels, photogrammetrical surveying, and other instruments that function through non-electronic means	None identified	
901600		Balances of a sensitivity of 5 cg or better, with or without weights.	Used to electronically weigh the differences between substances with varying characteristics	Used to weigh the differences between substances with varying characteristics through non-electronic means	None identified	
901730	ex	Micrometers	Used to electronically measure an object's inside and outside diameters, thickness, and screw thread pitch	Used to measure an object's inside and outside diameters, thickness, and screw thread pitch through non-electronic means	None identified	
901780	ex	Other instruments for measuring length	Used to electronically check dimension tolerances, measure distances, measure the diameter of convex items, and measure distances on maps, plans, etc.	Used to check dimension tolerances, measure distances, measure the diameter of convex items, and measure distances on maps, plans, etc. through non-electronic means	None identified	
901790		Parts and accessories of 90.17	Used in microtomes, calipers, and other instruments that function through electronic means	Used in microtomes, calipers, and other instruments that function through non-electronic means	None identified	
901811		Electro-cardiographs	Used to display electrical signals associated with heart muscles onto computer screens or flat panel displays	None identified	None identified	Stryker supports inclusion of this product in the ITA.
901812		Ultrasonic scanning apparatus	Uses high-frequency sound waves to produce computerized images of soft tissues onto flat panel displays	None identified	None identified	Both Stryker and NEMA support inclusion of this product in the ITA.
901813		Magnetic resonance imaging apparatus	Uses radio waves to create and display detailed images of organs and tissues onto computers or flat panel displays	None identified	None identified	Both Stryker and NEMA support inclusion of this product in the ITA.
901814		Scintigraphic apparatus	Used to display detailed, computerized images of tissues and organs	Used for radiation therapy	None identified	Both Stryker and NEMA support inclusion of this product in the ITA.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
901819		Other (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	Used to electronically monitor patient health	Used for sight-testing instruments	None identified	Stryker supports inclusion of this product in the ITA.
901820		Ultra-violet or infra-red ray apparatus	None identified	Used as a therapeutic medical device to facilitate muscle relaxation	None identified	Stryker supports inclusion of this product in the ITA.
901849		Other (Other instruments and appliances, used in dental sciences)	None identified	Used in dental examinations	None identified	Stryker supports inclusion of this product in the ITA.
901850		Other ophthalmic instruments and appliances	None identified	Used to treat ocular ailments, includes surgical scalpel blades	None identified	Stryker supports inclusion of this product in the ITA.
901890		Other instruments and appliances (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	Used to display detailed, computerized images of tissues and organs	Used for gallbladder removal procedures	None identified	Stryker supports inclusion of this product in the ITA.
902212		Computed tomography apparatus	Used for displaying multiple cross-sectional images of different areas inside the body onto computers and flat panel displays	None identified	None identified	NEMA supports inclusion of this product in the ITA.
902213		Other, for dental uses (Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	Used for dental x-ray imaging	None identified	None identified	
902214		Other, for medical, surgical or veterinary uses ((Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	Used for x-ray imaging	None identified	None identified	
902219		For other uses (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	Used for x-ray imaging for semiconductor testing and inspection and in threat detection equipment	None identified	None identified	NEMA supports inclusion of this product in the ITA.
902221		For medical, surgical, dental or veterinary uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	Used to view or produce computerized images of physical matter	Used for radiation therapy	None identified	NEMA supports inclusion of this product in the ITA.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
902229		For other uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	Used for wireless fire alarms	Used for non-wireless fire safety products	None identified	
902230		X-ray tubes	Used in x-ray imaging machines, which transmit images of organs and bones onto computers	None identified	None identified	NEMA supports inclusion of this product in the ITA.
902290		Other, including parts and accessories (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	Used in x-ray imaging machines	Used for radiation therapy and ionizing smoke detectors	None identified	NEMA supports inclusion of this product in the ITA.
902300		Instruments, apparatus and models, designed for demonstrational purposes (for example, in education or exhibitions), unsuitable for other uses.	Used as training simulators that function through electronic means, e.g., ship bridge, marine process, offshore process, aviation, and military tank simulators	Used as training and demonstration models (whether or not fitted with electric lighting) that function through non-electronic means	None identified	
902410		Machines and appliances for testing metals	Used to electronically test the mechanical properties of metals	Used to test the mechanical properties of metals through non-electronic means	None identified	
902480		Other machines and appliances (Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	Used to electronically test the mechanical properties of textiles, paper, plastics, rubber, wood, and concrete	Used to test the mechanical properties of textiles, paper, plastics, rubber, wood, and concrete through non-electronic means	None identified	
902490		Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics). ²⁸	Used to electronically test for mechanical properties of various materials	Used to test for mechanical properties of various materials through non-electronic means	None identified	
902511		Liquid-filled, for direct reading (Thermometers and pyrometers, not combined with other instruments)	None identified	Used to measure temperature based on the thermal expansion of a liquid	None identified	
902519		Other (Thermometers and pyrometers, not combined with other instruments)	Used to measure temperature by changes in the electrical resistance of a metal or of a semiconductor,	Used to measure temperature based on characteristic changes (e.g., pressure expansion	None identified	

²⁸ This description provided in USTR's draft list differs from the 6-digit HS subheading 9024.90. The given description reflects the language of the 4-digit heading 9024, whereas 9024.90 more narrowly provides for "parts and accessories." The examples of ICT and non-ICT uses for this product reflect USTR's proposed product description as given.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			by applying heat to two different electric conductors, which generates an electromotive force proportional to the temperature	and color changes) of a variety of mediums (e.g., gases, prisms, and metal strips)		
902580		Other instruments (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	Used to electronically measure specific gravity, atmospheric pressure, moisture content of the air and other gases, and humidity content as the difference between a dry and wet thermometer	Used to measure specific gravity through non-electronic means; measure atmospheric pressure, measure moisture content of the air or other gases, and measure humidity content as the difference between a dry and wet thermometer	None identified	
902590		Parts (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	Parts used in hydrometers and related instruments that function through electronic means	Parts used in hydrometers and related instruments that function through non-electronic means	None identified	
902710		Gas or smoke analysis apparatus	Used to electronically analyze gas content in gas and smoke emissions from ovens and furnaces used in manufacturing, including semiconductor manufacturing	Used to analyze gas content in gas and smoke emissions from manufacturing ovens and furnaces (for example, flue-gas monitoring) through non-electronic means	None identified	
902750		Optical radiations (UV, visible, IR) ²⁹	Used to perform physical and chemical analysis through optical radiation and electronic means; also used to test equipment for fiber-optic telecommunications and analyze complex optical modulated signals	Used to perform physical and chemical analysis through optical radiation and non-electronic means	None identified	
902780		Other instruments and apparatus (Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes)	Used to electronically perform chemical and physical analysis	Used to perform chemical and physical analysis through non-electronic means	None identified	

²⁹ UV is an abbreviation for ultraviolet light. IR is an abbreviation for infrared light.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
902790		Microtomes; parts and accessories	Used to cut very thin slices of semiconductor chips and related devices for microscopic examination	Used to cut very thin slices of materials for microscopic examination of a wide variety of objects, including specimens in medical and industrial laboratories	None identified	
902810		Gas meters	None identified	Used to measure the volume of gas flow through a service main or pipe	None identified	
902820		Liquid meters	None identified	Used to measure the volume of liquid flow through the service main or pipe	None identified	
902830		Electricity meters	None identified	Used to measure the volume flow of electricity through a service main	None identified	NEMA supports inclusion of smart electricity meters and parts/accessories classified under HS subheadings 9028.30 and 9028.90 in the ITA.
902890		Parts and accessories (Gas, liquid or electricity supply or production meters, including calibrating meters therefor)	None identified	Used in traditional gas, water, and electricity meters	None identified	NEMA supports inclusion of smart electricity meters and parts/accessories classified under HS subheadings 9028.30 and 9028.90 in the ITA.
902910		Revolution counters, production counters, taximeters, mileometers, pedometers and the like	Used to electronically count the number of revolutions (e.g., machine shaft), to measure lengths (e.g., twisting machine), and to count the number of articles delivered or carried (e.g., on a conveyor belt)	Used to count the number of revolutions (e.g., machine shaft), to measure lengths (e.g., twisting machine), and to count the number of articles delivered or carried (e.g., on a conveyor belt) through non-electronic means	None identified	
902920		Speed indicators and tachometers; stroboscopes	Used to electronically count the number of revolutions and output and to measure speed per unit of time	Used to count the number of revolutions and output and to measure speed per unit of time through non-electronic means	None identified	
902990		Parts and accessories (Revolution counters, production counters, taximeters, mileometers, pedometers and the like; speed indicators and tachometers, other than those of heading 90.14 or 90.15; stroboscopes.)	Used in electronic revolution counters, taximeters, and related instruments	Used in revolution counters, taximeters, and related instruments that operate through non-electronic means	None identified	
903010		Instruments and apparatus for measuring or detecting ionising radiations	Used to measure alpha, beta, gamma, x-ray, cosmic, and other ionizing radiations in semiconductor manufacturing	Used to measure alpha, beta, gamma, x-ray, cosmic, and other ionizing radiations in power stations and laboratories, and in	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				conducting biological and medical procedures		
903020		Oscilloscopes and oscillographs	Used to observe and record rapid variations of an electrical quantity (e.g., voltage, current, etc.) in the telecommunications industry; used to measure high-speed digital circuits, such as microprocessors and various serial data links	Used to observe and record rapid variations of an electrical quantity (e.g., voltage, current, etc.) in the automotive sector to correlate sensor and engine control unit data	None identified	
903031		Multimeters without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	Used to electronically measure voltage and current (direct or alternating), resistance, and capacitance	None identified	None identified	
903032		Multimeters with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	Used to electronically perform and record multiple rapid measurements at one time, including of voltages and currents (direct or alternating), resistances, and capacitances	None identified	None identified	
903033		Other, without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	Used to electronically measure voltage, current, resistance, or power; used to measure radiofrequency and microwave power emitted from cell phones, base stations, and other transmitters	Used to measure voltage, current resistance, or power through non-electronic means	None identified	
903039		Other, with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	Used to electronically measure and record voltage, current, resistance, or power; used to measure radiofrequency and microwave power emitted from cell phones, base stations, and other transmitters	Used to measure and record voltage, current resistance, or power through non-electronic means	None identified	
903084		Other, with a recording device (Other instruments and apparatus)	Used to electronically measure and record electrical quantities; includes logic analyzers for developing large information technology (IT) systems (computers, data communications)	Used to measure and record electrical quantities through the use of non-electronic means	None identified	
903089		Other (Other instruments and apparatus)	Used to electrically measure electronic quantities; used for wireless and fiber optical communication systems	Used to measure electrical quantities through non-electronic means	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			manufacturing			
903090		Parts and Accessories (Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 90.28; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionising radiations.)	Used in instruments for measuring and recording electrical quantities and ionizing radiations through electronic means; includes apparatus to measure ionizing radiation in semiconductor manufacturing, oscilloscope probes, and power meters measuring radiofrequency	Used in instruments for measuring and recording electrical quantities and ionizing radiations through non-electronic means	None identified	
903110		Machines for balancing mechanical parts	Used to balance mechanical parts through electronic means	Used to balance mechanical parts through non-electronic means	None identified	
903120		Test benches	Used to test semiconductor manufacturing equipment during the design and development phases to ensure that equipment meets specifications	Used to test engines, pumps, speed indicators, etc., during design and development phases to ensure that products meet specifications	Intel commented that this product is not import sensitive.	Intel supports inclusion of this product in the ITA.
903149		Other (Other optical instruments and appliances)	Used in semiconductor manufacturing to meet precise requirements; includes profile projectors and coordinate-measuring machines for checking the precise size and shape of semiconductor chips	Used in many manufacturing applications, including profile projectors and coordinate-measuring machines for checking the precise size and shape of parts for the automotive, aerospace, and tooling sectors	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of measuring and checking instruments not already covered, such as electron microscopes, profile projectors, and testing equipment for semiconductor manufacturing equipment classified under HS subheading 9031.49.
903180		Other instruments, appliances and machines (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	Used to handle and transport semiconductor wafers or reticles; used to inspect semiconductor devices as well as in the semiconductor manufacturing process to reduce risks of contamination and defects	Used to test the characteristics of internal combustion engines	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of measuring and checking instruments not already covered, such as electron microscopes, profile projectors, and testing equipment for semiconductor manufacturing equipment classified under HS subheading 9031.80.
903190		Parts and Accessories (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	Used in machines for balancing mechanical parts through electronic means; used in instruments, appliances, and machines to inspect semiconductor devices as well as in the semiconductor manufacturing process to reduce risks of contamination and defects	Used in machines for balancing mechanical parts through non-electronic means; used in instruments, appliances, and machines for manufacturing engines, pumps, and gears in the automotive, construction, and farm sectors	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of measuring and checking instruments not already covered, such as electron microscopes, profile projectors, and testing equipment for semiconductor manufacturing equipment classified under HS subheading 9031.90.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
	ex	Parts and accessories in 9031, except for parts for equipment for testing engines	Used in machines that balance mechanical parts through electronic means; used in test benches designed to test semiconductor manufacturing; used in optical instruments and appliances for semiconductor manufacturing, including profile projectors and coordinate-measuring machines, to meet requirements for precision; used in instruments, appliances, and machines specifically designed for the handling and transport of semiconductor wafers or reticles	Used in machines for balancing mechanical parts through non-electronic means; used in test benches designed to test pumps, gears, and speed indicators during development and test phases; used in profile projectors and coordinate-measuring machines for checking the precise size and shape of parts for the automotive, aerospace, and tooling sectors	Intel commented that this product is not import sensitive.	Intel supports inclusion in the ITA of measuring and checking instruments not already covered, such as electron microscopes, profile projectors, and testing equipment for semiconductor manufacturing equipment classified under HS subheading 9031.90.
903210		Thermostats	Used to automatically control temperature for environments or processes, including clean rooms, tube furnaces, and radiation chambers used in manufacturing semiconductors, flat panels, and other related products	Used to automatically control temperature for home and work environments and for refrigeration as well as to control furnace temperature for mineral and metal processing	None identified	NEMA supports inclusion of this product in the ITA.
	ex	Thermostats for manufacturing of semiconductors or flat panel displays	Used to automatically control temperature for environments or processes, including clean rooms, tube furnaces, and radiation chambers used in manufacturing semiconductors, flat panels, and other related products	None identified	None identified	
903220		Manostats	Used to automatically regulate pressure for the transfer and movement of liquids and gases in semiconductor manufacturing processes, including plasma etching and low-pressure chemical vapor deposition	Used to automatically regulate pressure for the transfer and movement of liquids and gases in a variety of applications, including furnaces for processing minerals and metals and for glass making	None identified	
	ex	Manostats (automatic regulating or controlling instruments and apparatus) for manufacturing of semiconductors or flat	Used to automatically control pressure in a variety of processes, including plasma	None identified	None identified	

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
		panel displays	etching and low-pressure chemical vapor deposition, used in manufacturing semiconductors and flat panel displays			
903281		Hydraulic or pneumatic (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	None identified	Used to test soil, cement, and concrete conditions for construction and mining industries	None identified	
	ex	Process control modules and complete systems	Used to automatically regulate and control pressure, temperature, liquid levels, and flow rates in the manufacture of semiconductors and flat panel displays	Used to regulate and control pressure, temperature, liquid levels and flow rates in the natural gas and petroleum processing industries	None identified	NEMA supports inclusion of process control modules used in PLCs and motor control centers classified under HS subheading 9032.81 in the ITA.
	ex	Automatic regulating or controlling instruments and apparatus of hydraulic or pneumatic for manufacturing of semiconductors or flat panel displays	Used to manufacture semiconductors and flat panel displays	None identified	None identified	
903289		Other (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	Used to automatically regulate or control processes for computer power supplies and telecommunication apparatus	Used to automatically regulate or control processes for a variety of operations, including food processing, transport, and storage; minerals and metals processing; and manufacturing operations of various products	None identified	
	ex	Other automatic regulating or controlling instruments and apparatus for manufacturing of semiconductors or flat panel displays	Used to manufacture semiconductors and flat panel displays	None identified	None identified	
903290		Parts and accessories (Automatic regulating or controlling instruments and apparatus)	Used in process control modules and other instruments for automatically regulating or controlling temperature, pressure, and humidity for manufacturing semiconductors and flat panel displays, as well as in instruments and apparatus to automatically regulate computer power supplies and telecommunication apparatus	Used in instruments and accessories for automatically regulating or controlling temperature for home and work environments, refrigeration, and furnaces for mineral and metal processing	None identified	NEMA supports inclusion of parts of process control modules used in PLCs and motor control centers classified under HS subheading 9032.90 in the ITA.
	ex	Parts and accessories, except for parts of thermostats and manostats	Used in process control modules and complete systems for manufacturing semiconductors and flat	Used in hydraulic or pneumatic instruments for testing soil, process control modules, and	None identified	NEMA supports inclusion of parts of process control modules used in PLCs and motor control centers classified under HS subheading

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
			panel displays	complete systems used in natural gas and petroleum processing industries		9032.90 in the ITA.
	ex	Parts and accessories (Automatic regulating or controlling instruments and apparatus) for manufacturing of semiconductors or flat panel displays	Used in instruments and accessories for automatically regulating temperature, pressure, and humidity for manufacturing semiconductors and flat panel displays	None identified	None identified	NEMA supports inclusion of parts of process control modules used in PLCs and motor control centers classified under HS subheading 9032.90 in the ITA.
903300		Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.	Used in machines, appliances, instruments, and apparatus for manufacturing semiconductors or flat panel displays	Used as parts for instruments used in petroleum analysis	None identified	
	ex	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90 for manufacturing of semiconductors or flat panel displays	Used in machines, appliances, instruments, and apparatus for manufacturing semiconductors or flat panel displays	None identified	None identified	
940510	ex	Chandeliers and other electric ceiling or wall lighting fittings using a LED light module as primary light source, excluding those of a kind used for lighting public open spaces or thoroughfares	None identified	Used to provide illumination	None identified	
940520	ex	Electric table, desk, bedside or floor-standing lamps using a LED light module as primary light source	None identified	Used to provide illumination	None identified	
940530	ex	Lighting sets of a kind used for Christmas trees using LED light modules as primary light source	None identified	Used to provide decorative illumination	None identified	
940540	ex	Other electric lamps and lighting fittings using a LED light module as primary light source	None identified	Used as light fittings and replacement LED lamps, such as lamps for residential buildings, lamps for commercial lighting, and lamps for outdoor lighting	None identified	Digital Lumens supports inclusion of this product because it forms a part of their "Intelligent Lighting System" that combines LEDs with networking and software technologies, and because LED fixtures incorporate semiconductor devices. ³⁰
940560	ex	Illuminated signs, illuminated name -plates and the like using a LED light module as primary light source	None identified	Used in signs (including road signs), nameplates, and similar articles incorporating a permanent light	None identified	
940591	ex	Parts of glass for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	None identified	Used in LED lamps and fixtures that provide illumination as well as in non-electric lamps and	None identified	

³⁰ Digital Lumens, written submission to the USITC, August 31, 2012.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
				light fittings		
940592	ex	Parts of plastics for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	None identified	Used in LED lamps and fixtures that provide illumination as well as in non-electric lamps and light fittings	None identified	
940599	ex	Other parts for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	None identified	Used in LED lamps and fixtures that provide illumination as well as in non-electric lamps and light fittings	None identified	
950410		Video games of a kind used with a television receiver	Used to electronically play games with television receivers providing video display	None identified	ESA commented that this product is not import sensitive and noted its duty-free status since 1995.	ESA supports inclusion of this product in the ITA. As of 2012, this product is classified under HS subheading 9504.50.
950430		Other games, operated by coins, banknotes, bank cards, tokens or by other means of payment, other than bowling alley equipment	Used to electronically play games with self-contained video display, such as handheld gaming devices	Used to play games such as pinball, slot machines, and other arcade- and gambling-type machines	ESA commented that this product is not import sensitive and noted its duty-free status since 1995.	ESA supports inclusion of this product in the ITA.
950490	ex	Video game machines capable of connecting to a wired or wireless network, whether or not portable, other than those of subheading 9504.10, and parts and accessories thereof	Used to play video games; includes game cartridges, controllers, parts, accessories, and other devices associated with video game machines and consoles	None identified	ESA commented that this product is not import sensitive and noted its duty-free status since 1995.	ESA supports inclusion of this product in the ITA. As of 2012, this product is classified under HS subheading 9504.50.
	ex	Game machines other than coin-operated arcade games and parts and accessories including game controllers, game cartridges, cases, steering wheels, etc.; 'Parts' for handheld gaming consoles	Used to play video games; includes game cartridges, controllers, parts, accessories, and other devices associated with video game machines and consoles	None identified	ESA commented that this product is not import sensitive and noted its duty-free status since 1995.	ESA supports inclusion of this product in the ITA. As of 2012, this product is classified under HS subheading 9504.50.
	ex	Electronic games and parts of video, electronic games	Used to play video games, and includes, game cartridges, controllers, parts, accessories, and other devices associated with video game machines and consoles	None identified	ESA commented that this product is not import sensitive and noted its duty-free status since 1995.	ESA supports inclusion of this product in the ITA. As of 2012, this product is classified under HS subheading 9504.50.
961210		Ribbons (Typewriter or similar ribbons, inked or otherwise prepared for giving impressions, whether or not on spools or in cartridges; ink-pads, whether or not inked, with or without boxes.)	Used in printers, fax machines, and similar devices for digitally printing, transferring, or capturing images, impressions, symbols, or text	None identified	None identified	

TABLE 2.2 List of products for proposed expansion of Attachment B, wherever classified¹

2007 Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
Multi-chip integrated circuits (MCPs) consisting of two or more interconnected monolithic integrated circuits combined to all intents and purposes indivisibly, whether or not on one or more insulating substrates, with or without lead frames, but with no other active or passive circuit elements, wherever classified.	Used as microprocessors, memory, signal processors, logic circuits, and timing circuits	None identified	None identified	Intel and the Tech Industry Coalition support inclusion of these products in the ITA under Attachment B, because parts of MCPs are classified under 8542.90, which is not included in Attachment A. ⁴
Multi-component integrated circuits (MCOs), wherever classified	Used in cell phones, automobile control devices, laptop computers, and portable electronic devices	None identified	Intel commented that this product is not import sensitive.	Intel and the Tech Industry Coalition support inclusion of these products in the ITA under Attachment B because they fall outside of the HS heading for integrated circuits (8542) and are often classified according to the finished product they will be inserted into as parts.
<p>Multi-component integrated circuits (MCOs) are a combination of one or more monolithic, hybrid, and/or multi-chip integrated circuits with one or more components A classifiable under heading 8532, 8533 or 8541, inductors classifiable under heading 8504, or silicon based MEMS B; formed to all intents and purposes indivisibly into a single body like an integrated circuit, as a component of a kind used for assembly onto a printed circuit board (PCB) or other carrier, through the connecting of pins, leads, balls, lands, bumps, or pads.</p> <p>A: The components may be discrete, manufactured independently then assembled onto the rest of the MCO, or integrated into other components, so they are not outwardly visible.</p> <p>B: Silicon based MEMS includes silicon based sensors, actuators, oscillators, resonators and combinations thereof. Silicon based sensors consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantities i and transforming these ii into electric signals, caused by resulting variations[s] in electronic properties iii or displacement of a mechanical structure.</p>	Used in cell phones, automobile control devices, laptop computers, and portable electronic devices	None identified	Intel commented that this product is not import sensitive.	Intel and the Tech Industry Coalition support inclusion of these products in the ITA under Attachment B because they fall outside of the HS heading for integrated circuits (8542) and are often classified according to the finished product they will be inserted into as parts.

¹ This is a positive list of specific products proposed to be covered by this agreement wherever they are classified in the HS.

² Product descriptions in this table are taken directly from the list provided to USITC by USTR, as supplied by ITA participant countries.

³ For further information on broad product categories, refer to the positions of interested parties in appendix C.

⁴ Intel, written submission to the USITC, September 6, 2012 and the Tech Industry Coalition, written submission to the USITC, September 6, 2012. The Tech Industry Coalition members are the Business Software Alliance, the Consumer Electronics Association, the Entertainment Software Association, the Information Technology Industry Council, the National Electrical Manufacturers Association, Semiconductor Equipment and Materials International, the Semiconductor Industry Association, the Software and Information Industry Association, TechAmerica, and the Telecommunications Industry Association. All citations to the Tech Industry Coalition in the tables are to this submission.

TABLE 2.2 List of products for proposed expansion of Attachment B, wherever classified¹

2007 Proposed product description ²	Examples of ICT uses	Examples of non-ICT uses	Import sensitivity	Comments ³
<p>Silicon based actuators consist of microelectronic and mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of transforming electrical signals into physical movement. Silicon based resonators and silicon based oscillators consists of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.</p> <p>i Physical quantities relating to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration etc.</p> <p>ii e.g. energy, mechanical displacement, photo-signals, etc.</p> <p>iii e.g. resistance, capacitance</p> <p>iv "Silicon based" refers to devices built on a silicon substrate, or made of silicon materials, or manufactured onto integrated circuit die</p>				
Set-top boxes, wherever classified	Used to convert cable television and network signals into a form that TV sets can use and to provide interactive communications between the user and selectable cable/network services	None identified	None identified	The United States covers set-top boxes in two places in the HTS, in heading 8525 and in heading 8528.
Monitors, of liquid crystal display	Used as displays for televisions or computers	None identified	None identified	
Liquid crystal modules	Used as display devices for various products, including computers, televisions, and cell phones	Used as display devices for home appliances, watches, clocks, etc.	None identified	
LED (light-emitting diode) lamps	None identified	Used to provide illumination; replace incandescent or compact fluorescent lamp (CFL) bulbs	None identified	
LED (light-emitting diode) arrays	None identified	Used to provide illumination; replace incandescent or CFL bulbs	None identified	

APPENDIX A
Request Letter

EXECUTIVE OFFICE OF THE PRESIDENT
THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON, D.C. 20508

The Honorable Irving A. Williamson
Chairman
United States International Trade Commission
500 E Street, S.W.
Washington, DC 20436

DOCKET NUMBER
2905
Office of the Secretary Int'l Trade Commission

JUL 30 2012

RECEIVED
JUL 31 2012
OFFICE OF THE SECRETARY U.S. INTL. TRADE COMMISSION

Dear Chairman Williamson:

Opening markets through elimination of tariff barriers has been an ongoing objective of this Administration. The successful conclusion of the Information Technology Agreement (ITA) in 1996 opened markets in 42 countries to U.S. exports of computers, semiconductors, telecommunications, software, and other electronics products. The ITA now includes 74 Participants representing 97 percent of trade in the products covered by the agreement. The elimination of duties under the ITA has helped to generate substantial growth in trade of information and communications technology (ICT) goods.

On June 30, 1997, under the authority provided in Section 111(b) of the Uruguay Round Agreements Act (URAA), the President proclaimed the reduction and eventual elimination of duties for products covered by the ITA. In section 111(b) of the URAA, Congress authorized the President to proclaim further modifications of any duty for articles contained in a tariff category that was part of a "zero-for-zero" (that is, reciprocal duty elimination) initiative during the Uruguay Round.

Early on, the ITA Participants recognized that rapidly changing technology and innovation cycles in the ICT sector, as well as differences in tariff nomenclature, made it essential that the product coverage under the agreement be subject to review and expansion. At a May 15, 2012, meeting in Geneva, there was broad agreement among ITA Participants to proceed with negotiations, which will be conducted under the auspices of the WTO, to expand ITA product coverage. A number of ITA Participants have prepared a draft list of products that could be considered for addition to ITA product coverage, and a more formal negotiating process is expected to commence in September. This list of products is attached.

On May 6, 2011, USTR published a notice in the *Federal Register* requesting comments on additional ICT products the United States should seek to include in and provide duty-free treatment for under the ITA, including both products that existed when the ITA was concluded in 1996, but that were not covered under the agreement, as well as products that have been developed since then. USTR also sought comments regarding which U.S. trading partners that are significant producers or consumers of ICT products that are not currently participants in the ITA, the United States should seek to have join the ITA. We received considerable detailed advice from U.S. stakeholders concerning both products that might be included in discussions in

The Honorable Irving A. Williamson
Page Two

an ITA expansion process, and trading partners that the United States should seek to have join the ITA.

Therefore I request, pursuant to section 115 of the URAA (19 U.S.C. 3524) and section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), that the Commission provide advice and information to USTR on the list of ICT products attached to this letter. This advice and information should be delivered in two reports.

In the first report, I request that the Commission, to the extent practicable, based on available information and information furnished by interested parties in response to the Commission's notice of investigation: (1) indicate both the ICT and non-ICT purposes for which each product on the attached list is used; and (2) identify the products that U.S. industry and other interested parties view as import-sensitive. I request that the Commission provide this report no later than October 24, 2012.

In the second report, I request that the Commission, to the extent practicable, identify for each of the products on the attached list: (1) tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports. I also request that the Commission provide an overview of selected key subsectors, and to the extent practicable, examine benefits to the U.S. industry of ITA expansion, including information on increased market access and export opportunities for products in these subsectors. I request that the Commission provide this second report no later than February 15, 2013.

It is the intent of this office that the Commission's reports be made available to the general public in their entirety. Therefore, the reports should not contain any confidential business or national security classified information.

Should my office, in the course of the Commission's investigation, identify information that clarifies definitions of the products on the attached list, we will formally notify that information to the Commission in writing. I appreciate your assistance and cooperation on this matter and look forward to working with you and your staff on these issues in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Kirk", written over a horizontal line.

Ambassador Ron Kirk

Enclosures

ATTACHMENT A - bis

COVER NOTE: The following products have been proposed by Members to be subject to the obligations set out in the Information Technology Agreement. Some products included in this list may already be covered by the Agreement; the proposals for these items are without prejudice to participants' existing rights and obligations under the Agreement and the GATT 1994.

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
321511		Printing ink, black	There is more than one proposal for this HS code.
	ex	Printing ink (black) packaged in the ink jet cartridge	
321519		Printing ink, other than black	There is more than one proposal for this HS code.
	ex	Printing ink (other than black) packaged in the ink jet cartridge	
321590		Inks, other than printing ink	
350691	ex	Optically clear free-film adhesives for the manufacture of displays and touch screen panels	
370110		For X-ray (Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	
370130		Other plates and film, with any side exceeding 255 mm	
370199		Other ((Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	
370242		Of a width exceeding 610 mm and of a length exceeding 200 m, other than for colour photography (Other film, without perforations, of a width exceeding 105 mm)	
370243		Of a width exceeding 610 mm and of a length not exceeding 200 m (Other film, without perforations, of a width exceeding 105 mm)	
370244		Of a width exceeding 105 mm but not exceeding 610 mm (Other film, without perforations, of a width exceeding 105 mm)	
370590		Other photographic plates and film, exposed and developed, other than motion-picture film, including photomasks and reticules	
370710		Sensitizing emulsions	
370790		Other (Chemical preparation for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use)	
390730	ex	Epoxide resins molding compounds for semiconductor encapsulation	There is more than one proposal for this HS code.
	ex	Glass and epoxy, cotton paper and epoxy, phenolic cotton paper and woven glass and epoxy resins for the manufacture of printed circuits	
392061	ex	Optical films of polycarbonates for the manufacture of LCD / LED displays and screens	
392062	ex	Optical films of poly(ethylene terephthalate) for the manufacture of LCD / LED displays and screens	
392190	ex	Other plates, sheets, film, foil and strip of plastics, flexible, not reinforced with paper or combined with textile materials for the manufacture of printed circuits	
392310	ex	Articles of plastic for the conveyance, packing or shipping of semiconductor wafers, masks, and reticles	
392690	ex	Plastic enclosures or cases for use in goods classified in 85.17	There is more than one proposal for this HS code.
	ex	Other articles of plastics for use in telecommunication and ICT devices	
481190		Other paper, paperboard, cellulose wadding and webs of cellulose fibres	
490700	ex	Documents of title, specifically licenses to use software in printed form	
491110	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	
491199	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	
690310	ex	Graphite or SiC (silicon carbide) crucible for the manufacture of semiconductor devices	
690911	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	
690919	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	
700220	ex	Unworked glass rods of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	
700231	ex	Unworked glass tubes of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	
700600		Glass of heading 70.03, 70.04 or 70.05, bent, edge-worked, engraved, drilled, enamelled or otherwise worked, but not framed or fitted with other materials	There is more than one proposal for this HS code.
	ex	High purity fused silica plates for the manufacture of photoblanks or photomasks, or otherwise designed for the manufacture or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof, or telecommunications equipment or parts or accessories of any of the foregoing	
701400	ex	Signaling glassware and optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, integrated circuits or flat panel displays	
701710	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
702000	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
741011	ex	Copper foil of refined copper not backed of thickness not exceeding 0.15mm designed for printed circuits	
741021	ex	Copper clad laminates backed with paper, paperboard, plastics, or similar backing materials of a thickness (excluding any backing) not exceeding 0.15 mm	
841381		Pumps (Other pumps; liquid elevators)	
841410	ex	Vacuum pumps of a kind used for the production of semiconductors or flat panel displays	
841459		Other Fans	There is more than one proposal for this HS code.
	ex	Fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	
841490	ex	Parts of fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	
841510	ex	Air conditioning machines which have apparatus for communication in wired or wireless network (of window or wall types, self-contained or "split-system")	There is more than one proposal for this HS code.
	ex	Air conditioning machines which can process digital signals or communicate with or without lines	
841810	ex	Combined refrigerator-freezers, fitted with separate external doors which can process digital signals or communicate with or without lines	
841821	ex	Household type and compression-type refrigerators which have apparatus for communication in wired or wireless network	There is more than one proposal for this HS code.
	ex	Refrigerators, household type : Compression-type, which can process digital signals or communicate with or without lines	
841829	ex	Refrigerators, household type : not compression-type, which can process digital signals or communicate with or without lines	
841899	ex	Parts of house hold type refrigerators, freezers and other refrigerating or freezing equipment electric or other; heat pumps, where the parts are related to the functions that process digital signals or communicate with or without lines.	
841939	ex	Spin dryers for machines and mechanical appliances for making semiconductors, flat panel displays and PCAs	
841950	ex	Heat exchange units to be used for the production of semiconductors and flat panel displays	
842010	ex	Roll laminators and laminate presses of a kind used for the production of printed circuits	
842129	ex	Liquid filtering equipment for semiconductor and flat panel display manufacturing	
842139	ex	Gas filtering equipment for semiconductor and flat panel display manufacturing	
842199	ex	Parts of filtering equipment for semiconductor and flat panel display manufacturing	
842489	ex	Spraying apparatus for etching, developing, stripping, or cleaning; or application of coating or sealants manufacture of printed circuits or printed circuit assemblies	
842490	ex	Parts for spraying apparatus for etching, developing, stripping or cleaning; or application of coating or sealants for the manufacture of printed circuits or printed circuit assemblies	
842890	ex	Other machines for lifting, handling, loading or unloading printed circuits or substrates for the manufacture of printed circuit or printed circuit assemblies	
843139	ex	Hard disk process carriers, transport carriers and similar items specially designed for the manufacturing, transport, or storage of hard disk drive components	
844230		Machinery, apparatus, and equipment	
844240		Parts of the foregoing machinery, apparatus, or equipment	
844250		Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)	There is more than one proposal for this HS code.
	ex	Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits	
	ex	Plates for applying solder, flex adhesive, or sealants to printed circuits	
844319		Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442)	
844331		Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data-processing machine or to a network	
844332		Other, capable of connecting to an automatic data processing machine or to a network (Other printers, copying machines, and facsimile machines, whether or not combined)	There is more than one proposal for this HS code.
	ex	Screen printing machinery for the manufacture of printed circuit boards or printed wiring boards	
844339		Other (Other printers, copying machines and facsimile machines, whether or not combined)	
844391		Parts and accessories of printing machinery used for printing by means of plates, cylinders, and other printing components of heading 8442.	There is more than one proposal for this HS code.
	ex	Parts of Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits; Parts of plates for applying solder, flex adhesive, or sealants to printed circuits	
844399		Parts and Accessories, Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof)	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
845011	ex	Fully-automatic household or laundry-type washing machines which have apparatus for communication in wired or wireless network	There is more than one proposal for this HS code.
	ex	Household or laundry-type fully-automatic washing machines, which can process digital signals or communicate with or without lines	
845012	ex	Household or laundry-type washing machines, which can process digital signals or communicate with or without lines	
845019	ex	Household or laundry-type washing machines, including machines which both wash and dry, which can process digital signals or communicate with or without lines	
845090	ex	Parts of household or laundry-type washing machines, where the parts are related to the functions that process digital signals or communicate with or without lines.	
845610	ex	Machine tools operated by laser or other light or photo beam processes for drilling, routing, or marking printed circuit substrates or printed circuits	There is more than one proposal for this HS code.
	ex	Machine tools operated by laser or other light or photo beam processes for use in cutting process or drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
845620	ex	Machine-tools operated by ultrasonic processes for use in machining printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
845630	ex	Machine tools operated by electro-discharge processes for cutting wafers	
845690	ex	Plasma cleaner machines that remove organic contaminants from electron microscopy specimens and specimen holders in semiconductor production process	
845710	ex	Machining centres of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845811	ex	Numerically controlled (horizontal lathes) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845891	ex	Numerically controlled (other lathes) of a kind used for the production of parts of mobile devices, PC, semiconductor and flat panel displays.	
845921	ex	Numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845961	ex	Numerically controlled (Other milling machines) numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
846150	ex	Sawing or cutting-off machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846210	ex	Forging or die-stamping machines (including presses) and hammers of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846221	ex	Numerically controlled (Bending, folding, straightening or flattening machines (including presses)) of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846592	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits	There is more than one proposal for this HS code.
	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits, or parts of mobile devices, automatic data processing machines, or flat panel displays.	
846593	ex	Grinding, sanding or polishing machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846595	ex	Drilling machines for drilling holes in printed circuits or printed circuit laminate	There is more than one proposal for this HS code.
	ex	Drilling or mortising machines for use in drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
846900		Typewriters other than printers of heading 84.43; wordprocessing machines.	
847210		Duplicating machines	
847230		Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps	
847290	ex	Automatic banknote dispensers, coinsorting machines, coin-counting, and other currency coin handling machines	
847310		Parts and accessories of the machines of heading 84.69	
847340		Parts and accessories of the machines of heading 8472	There is more than one proposal for this HS code.
	ex	Parts and accessories of the machines of heading 847210, automatic banknote dispensers, coinsorting machines, coin-counting in 847290, and other currency coin handling machines, and automatic teller machines in 847290	
847521		Machines for making optical fibers and preforms thereof	
847590	ex	Parts for machines described in 8475.21	
847689	ex	Money-changing machines	
847690	ex	Parts of money-changing machines and DVD vending kiosks	
847950		Industrial robots, not elsewhere specified or included	
847982	ex	Mixing, kneading or stirring machines, specifically machines for mixing etchant solutions for printed circuit assemblies	
847989	ex	Machines and mechanical appliances having individual functions which have apparatus for communication in wired or wireless network (not specified or included elsewhere in Chapter 84, other than those of subheadings 8479.10 to 8479.82)	There is more than one proposal for this HS code.
	ex	Automated electronic component placement machines for the manufacture of printed circuit assemblies	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
847990	ex	Parts for automated electronic component placement machines for the manufacture of printed circuit assemblies in subheading 847989	There is more than one proposal for this HS code.
	ex	Parts for covered articles in heading 8479	
848071	ex	Injection and compression moulds for the manufacture of semiconductor devices	
848110	ex	Pressure -reducing valves of a kind used for the production of semiconductor and flat panel display	
848130	ex	Check (nonreturn) valves of a kind used for the production of semiconductor and flat panel display	
848140	ex	Safety and release valves of a kind used for the production of semiconductor and flat panel display	
848180	ex	Hand operated-valves of a kind used for the production of semiconductor and flat panel display manufacturing	
848190	ex	Parts of covered valves	
848610		Machines and apparatus for the manufacture of boules or wafers	
848620		Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	
848630		Machines and apparatus for the manufacture of flat panel displays	
848640		Machines and apparatus specified in Note 9(C) to this Chapter	
848690		Parts and accessories (Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in Note 9 (C) to this chapter; parts and accessories)	
850110		Motors of an output not exceeding 37.5 W	
850151		Of an output not exceeding 750 W (Other AC motors, multi-phase)	
850152		Of an output exceeding 750 W but not exceeding 75 kW (Other AC motors, multi-phase)	
850163		Of an output exceeding 375 kVA but not exceeding 750 kVA (AC generators (alternators))	
850164		Of an output exceeding 750 kVA (AC generators (alternators))	
850300		Parts suitable for use solely or principally with the machines of heading 8501 or 8502	
850410		Ballasts for discharge lamps or tubes	
850421		Having a power handling capacity not exceeding 650 kVA (Liquiddielectric transformers)	
850422		Having a power handling capacity exceeding 650kVA but not exceeding 10,000 kVA (Liquiddielectric transformers)	
850423		Having a power handling capacity exceeding 10,000 kVA (Liquid dielectric transformers)	
850431		Having a power handling capacity not exceeding 1 kVA (Other transformers)	
850432	ex	Transformers having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA for telecommunications equipment	
850433	ex	Transformers having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA for telecommunications equipment	
850440		Static converters	
850450		Other Inductors	
850490		Parts of power supplies for automatic data processing machines or units thereof of heading 8471; of power supplies for goods of subheading 8443.31 or 8443.32; of power supplies for monitors of subheading 8528.41 or 8528.51 or projectors of subheading 8528.61.	There is more than one proposal for this HS code.
	ex	Parts for transformers for telecommunications equipment, static converters and inductors	
850511		Of metal (Permanent magnets and articles intended to become permanent magnets after magnetization)	
850519		Other than of metal (Permanent magnets and articles intended to become permanent magnets after magnetisation)	
850520		Electromagnetic couplings, clutches and brakes	
850590	ex	Electromagnets and permanent magnets designed for magnetic resonance imaging apparatus	
850610		Manganese dioxide (Primary cells and primary batteries)	
850650		Lithium (Primary cells and primary batteries)	
850720	ex	Other lead-acid storage batteries, excluding those used in motor vehicles	There is more than one proposal for this HS code.
	ex	Lead-acid accumulators for use in goods classified in 85.17	
850730	ex	Nickel-cadmium storage batteries, excluding those used in motor vehicles	
850740	ex	Nickel-iron electric storage batteries, excluding those used in motor vehicles	
850780		Other accumulators	There is more than one proposal for this HS code.
	ex	Other storage batteries excluding those used in motor vehicles	
	ex	Lithium-ion accumulators for use in goods classified in 85.17	
850790	ex	Parts, excluding parts used in batteries for use in motor vehicles	
851310	ex	Lamps using a LED light module as primary light source	
851390	ex	Parts for lamps using a LED light module as primary light source	
851430	ex	Solder ovens of a kind used for the production of printed circuits or printed circuit assemblies	There is more than one proposal for this HS code.
	ex	Five stage convection ovens of a kind used for the production of printed circuits	
851440	ex	Other equipment for the heat treatment of materials by induction or dielectric loss for the purpose of semiconductor manufacturing	
851490	ex	Parts for furnaces and ovens of a kind used for the production of printed circuits or printed circuit assemblies	
851519	ex	Other waver soldering machines for the manufacture of printed circuits and printed circuit assemblies	
851590	ex	Parts for covered articles in 8515.	
851650	ex	Microwave ovens which have apparatus for communication in wired or wireless network	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
851660	ex	Electric ovens, other than microwave ovens which have apparatus for communication in wired or wireless network; cookers, cooking plates, boiling rings, grillers and roasters which have apparatus for communication in wired or wireless network	
851679	ex	Electro-thermic appliances of a kind used for domestic purposes which have apparatus for communication in wired or wireless network (other than those of subheadings 8516.10 to 8516.72)	
851761		Base stations	
851762		Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus.	
851769		Other (Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network)).	There is more than one proposal for this HS code.
	ex	Other voices, images or data reception apparatus for radiotelephony or radiotelegraphy	
851770		Parts (Telephone sets, including telephones for cellular networks or for other wireless networks; Parts of other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network), other than transmission or reception apparatus of headings 84.43, 85.25, 85.27 or 85.28)	
851810		Microphones and stands therefore	There is more than one proposal for this HS code.
	ex	Microphones condenser, with a diameter of not exceeding 15 mm and wireless microphones, including transmission apparatus	
	ex	Microphones and stands therefore	
851821		Single loudspeakers, mounted in their enclosures	
851822		Multiple loudspeakers, mounted in the same enclosure	
851829		Other (Loudspeakers, whether or not mounted in their enclosures)	There is more than one proposal for this HS code.
	ex	Loudspeakers, whether or not mounted in their enclosures, other	
851830		Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	There is more than one proposal for this HS code.
	ex	Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	
	ex	Wireless handsets for telephonic apparatus	
	ex	Other wireless combined microphone / speaker sets	
851840		Audio-frequency electric amplifiers	
851850		Electric sound amplifier sets	
851890		Parts (Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets.)	
851920		Apparatus operated by coins, banknotes, bank cards, tokens or by other means of payment	
851930		Turntables (record-decks)	
851981		Using magnetic, optical or semiconductor media (Sound recording or reproducing apparatus- Other apparatus)	
851989		Other (Sound recording or reproducing apparatus)	
852110		Magnetic tape-type	
852190		Other (Video recording or reproducing apparatus, whether or not incorporating a video tuner)	
852210		Pick-up cartridges	
852290		Other (Parts and accessories suitable for use solely or principally with the apparatus of headings 85.19 to 85.21)	There is more than one proposal for this HS code.
	ex	Other, including multi-component Integrated circuits incorporated as a part of electronic surveillance equipment, but excluding cabinets and cases of wood	
852321		Cards incorporating a magnetic stripe	There is more than one proposal for this HS code.
	ex	Cards incorporating a magnetic stripe, use for recording data or programs in code form for automatic data processing machines, whether or not recorded.	
852329		Other (Magnetic media)	
852340		Optical media	
852351		Solid-state non-volatile storage devices	
852352		Smart cards	
852359		Other (Semiconductor media)	
852380		Other (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	There is more than one proposal for this HS code.
	ex	Other, other than acetate discs for record players (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	
852550		Transmission apparatus	
852560		Transmission apparatus incorporating reception apparatus	
852580		Television cameras, digital cameras and video camera recorders	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
852610		Radar apparatus	
852691		Radio navigational aid apparatus	
852692		Radio remote control apparatus	
852712		Pocket-size radio cassette-players	
852713		Other apparatus combined with sound recording or reproducing apparatus	
852719		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852721		Other radio-broadcast receivers capable of operating without an external source of power	
852729		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852791		Combined with sound recording or reproducing apparatus	
852792		Not combined with sound recording or reproducing apparatus but combined with a clock	
852799		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852849		Other (Cathode-ray tube monitors)	
852859		Other (Other monitors)	
	ex	Monitors, not incorporating television reception apparatus with a diagonal size of 24 inches or less (excl with cathode ray tube and those of a kind solely or principally used in an automatic data-processing machine of heading 8471)	There is more than one proposal for this HS code.
852869		Other (Projectors)	
852871		Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, not designed to incorporate a video display or screen	
852872		Other, colour (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	
	ex	Reception apparatus for television, colour, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	There is more than one proposal for this HS code.
852873		Other, black and white or other monochrome (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	
	ex	Reception apparatus for television, black and white or other monochrome, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	There is more than one proposal for this HS code.
852910		Aerials and aerial reflectors of all kinds; parts suitable for use therewith	
	ex	Other aerials and aerial reflectors of a kind used with transmission apparatus for radio-broadcasting or television	There is more than one proposal for this HS code.
852990		Other (Parts suitable for use solely or principally with the apparatus of headings 85.25 to 85.28.)	
	ex	Other, including multi-component integrated circuits incorporated as a part of set-top box, but excluding cabinets and cases of wood	There is more than one proposal for this HS code.
853010		Equipment for railways or tramways (Electrical signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	
853080		Other equipment (Electrical signalling, safety or traffic control equipment for roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	
853090		Parts (Electrical signalling, safety or traffic control equipment which is controlled with automatic data processing machines (other than those heading 86.08))	
853180		Other apparatus (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30.)	
	ex	CRT indicator panels and displays	There is more than one proposal for this HS code.
853190		Parts (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30)	
	ex	Parts of Electric sound or visual signalling apparatus, other than those of heading 85.12 or 85.30. (excluding for burglar or fire alarms and similar apparatus)	There is more than one proposal for this HS code.
853540		Lightning arresters, voltage limiters and surge suppressors	
853590		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes), for a voltage exceeding 1,000 volts.)	
853610		Fuses	
853620		Automatic circuit breakers	
853630		Other apparatus for protecting electrical circuits	
	ex	Power strips and surge protectors	There is more than one proposal for this HS code.
853641		For a voltage not exceeding 60 V (Relays)	
	ex	Electrical relays for a voltage not exceeding 60v designed for industrial automation applications	There is more than one proposal for this HS code.
853649		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	
	ex	Other relays designed for industrial automation applications	There is more than one proposal for this HS code.
853650		Other switches	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
853661		lamp-holder	
853669		Other (lamp-holders, plugs, and sockets)	
853670		Connectors for optical fibres, optical fibre bundles or cables	
853690		Other apparatus (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	There is more than one proposal for this HS code.
	ex	Wafer probing plates, probe cards, prober docking hardware, prober docking manipulator, or other items designed for testing semiconductor wafers	
853710		For a voltage not exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	
853720		For a voltage exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	
853810		Boards, panels, consoles, desks, cabinets and other bases for the goods of heading 85.37, not equipped with their apparatus	
853890		Other (Parts suitable for use solely or principally with the apparatus of heading 85.35, 85.36 or 85.37.)	There is more than one proposal for this HS code.
	ex	Parts for items in 8536 and 8537, specifically printed circuit assemblies, molded parts, other parts of switchgear, switchboards, panel boards and distribution boards and adaptors of heading 8537	
853939	ex	Cool cathode lamp for the manufacture of flat panel displays	
853949		Other (Ultra-violet or infra-red lamps; arc-lamps)	
854011		Colour (Cathode-ray television picture tubes, including video monitor cathode-ray tubes)	
854012		Black and white or other monochrome (cathode-ray television picture tubes, including video monitor cathode-ray tubes)	
854020		Television camera tubes; image converters and intensifiers; other photo-cathode tubes	There is more than one proposal for this HS code.
	ex	Television camera tubes; image converters and intensifiers; other photo-cathode tubes, for use with articles of headings 85.25	
854040		Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm	There is more than one proposal for this HS code.
	ex	Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm, for use with articles of headings 85.25	
854050		Data/graphic display tubes, black and white or other monochrome	There is more than one proposal for this HS code.
	ex	Data/graphic display tubes, black and white or other monochrome, for use with articles of headings 85.25	
854060		Other cathode-ray tubes	There is more than one proposal for this HS code.
	ex	Other cathode-ray tubes, for use with articles of headings 85.25	
854071		Magnetrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Magnetrons, for use with articles of headings 85.25	
854072		Klystrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	
854079		Other (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Other microwave tubes, for use with articles of headings 85.25	
854081		Receiver or amplifier valves and tubes	There is more than one proposal for this HS code.
	ex	Receiver or amplifier valves and tubes, for use with articles of headings 85.25	
854089		Other (Other valves and tubes)	
854091		Of cathode-ray tubes (Parts)	
854099		Other (Parts of Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Parts of valves and tubes, other than cathode-ray, for use with articles of headings 85.25	
854231		Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (Electronic integrated circuits)	
854232		Memories (Electronic integrated circuits)	
854233		Amplifiers (Electric integrated circuits)	
854239		Other (Electronic integrated circuits)	
854310		Particle accelerators	
854320		Signal generators	
854330	ex	Electroplating and electrolysis machines for applying various metals to printed circuits and printed circuit assemblies	
854370		Other machines and apparatus (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	There is more than one proposal for this HS code.
	ex	Articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks	
	ex	Microwave amplifiers	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
854390		Parts (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	
	ex	Parts of signal generators; electroplating and electrolysis machines for copper to printed circuits and printed circuit substrates; articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks; microwave amplifiers; and electrical machines with translation or dictionary functions. Printed circuit assemblies for parts of equipment in 8543	There is more than one proposal for this HS code.
854411		Of copper (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	
854419		Other (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	
854420		Coaxial cable and other coaxial electric conductors	
854442		Fitted with connectors (Other electric conductors, for a voltage not exceeding 1,000 V)	
854449		Other (Other electric conductors, for a voltage not exceeding 1,000 V)	
854460		Other electric conductors, for a voltage exceeding 1,000 V (Other electric conductors, for a voltage not exceeding 1,000 V)	
854519		Other (Electrodes) (Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon, with or without metal, of a kind used for electrical purposes.)	
854590	ex	Other carbon, with or without metal, of a kind used for electrical purpose (excluding carbons rod, electrodes, brushes)	
854710	ex	Insulated fittings of ceramics for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
854790	ex	Quartz or fused silica insulated fittings for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
880260	ex	Communications satellites	
880390	ex	Parts of communications satellites	
900110		Optical fibres, optical fibre bundles and cables	
900120		Sheets and plates of polarising material	
900190		Other (Optical fibres and optical fibre bundles; optical fibre cables other than those of heading 85.44; sheets and plates of polarising material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked.)	
	ex	Optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, lithography equipment, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof (wherever classified), or telecommunications equipment or parts or accessories of any of the foregoing	There is more than one proposal for this HS code.
	ex	Optical films cut to shape and size for the manufacture of LCD / LED displays and screens	
900211		For cameras, projectors or photographic enlargers or reducers (Objective lenses)	
900219		Other (Objective lenses)	
900220		Filters (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	
900290		Other (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	
900661		Discharge lamp ("electronic") flashlight apparatus	
900669		Other (Parts and accessories) (Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 85.39.)	
900820		Microfilm, microfiche or other microform readers, whether or not capable of producing copies	
900830		Other image projectors	
900840		Photographic (other than cinematographic) enlargers and reducers	
900890		Parts and accessories (Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers.)	
901050		Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes	
901060		Projection screens	
901090		Parts and accessories (Apparatus and equipment for photographic (including cinematographic) laboratories, not specified or included elsewhere in this Chapter; negatoscopes; projection screens.)	
	ex	Parts and accessories for articles in 9010.50 and 9010.60.	There is more than one proposal for this HS code.
901110		Stereoscopic microscopes	
901120		Other microscopes, for photomicrography, cinephotomicrography or microprojection	
901180		Other microscopes (Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection.)	
901190		Parts and accessories (Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection.)	
901210		Microscopes other than optical microscopes; diffraction apparatus	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
901290		Parts and accessories (Microscopes other than optical microscopes; diffraction apparatus.)	
901310		Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.	
901320		Lasers, other than laser diodes	There is more than one proposal for this HS code.
	ex	Lasers and light sources and parts thereof for the manufacture of semiconductors or flat panel displays	
901380		Other devices, appliances and instruments (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	
901390		Parts and Accessories (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	There is more than one proposal for this HS code.
	ex	Parts and accessories for flat panel displays, liquid crystal displays, attenuator fiber optic for telecommunication networks, and laser and light sources designed for the manufacture of semiconductor or flat panel displays	
901410		Direction finding compasses	
901420		Instruments and appliances for aeronautical or space navigation (other than compasses)	
901480		Other optical navigational instruments	There is more than one proposal for this HS code.
	ex	Other optical navigational instruments, excluding ships' logs and depth-sounding apparatus	
901490		Parts and accessories (Direction finding compasses; other navigational instruments and appliances; parts and accessories thereof)	
901510		Rangefinders	
901520		Theodolites and tachymeters (tacheometers)	
901530		Levels	
901540		Photogrammetrical surveying instruments and appliances	
901580		Other instruments and appliances	
901590		Parts and accessories (Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders; parts and accessories thereof)	
901600		Balances of a sensitivity of 5 cg or better, with or without weights.	
901730	ex	Micrometers	
901780	ex	Other instruments for measuring length	
901790		Parts and accessories of 90.17	
901811		Electro-cardiographs	
901812		Ultrasonic scanning apparatus	
901813		Magnetic resonance imaging apparatus	
901814		Scintigraphic apparatus	
901819		Other (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	
901820		Ultra-violet or infra-red ray apparatus	
901849		Other (Other instruments and appliances, used in dental sciences)	
901850		Other ophthalmic instruments and appliances	
901890		Other instruments and appliances (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	
902212		Computed tomography apparatus	
902213		Other, for dental uses (Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902214		Other, for medical, surgical or veterinary uses ((Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902219		For other uses (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	
902221		For medical, surgical, dental or veterinary uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902229		For other uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902230		X-ray tubes	
902290		Other, including parts and accessories (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	
902300		Instruments, apparatus and models, designed for demonstrational purposes (for example, in education or exhibitions), unsuitable for other uses.	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
902410		Machines and appliances for testing metals	
902480		Other machines and appliances (Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	
902490		Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	
902511		Liquid-filled, for direct reading (Thermometers and pyrometers, not combined with other instruments)	
902519		Other (Thermometers and pyrometers, not combined with other instruments)	
902580		Other instruments (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	
902590		Parts (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	
902710		Gas or smoke analysis apparatus	
902750		Optical radiations (UV, visible, IR)	
902780		Other instruments and apparatus (Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes)	
902790		Microtomes; parts and accessories	
902810		Gas meters	
902820		Liquid meters	
902830		Electricity meters	
902890		Parts and accessories (Gas, liquid or electricity supply or production meters, including calibrating meters therefor)	
902910		Revolution counters, production counters, taximeters, mileometers, pedometers and the like	
902920		Speed indicators and tachometers; stroboscopes	
902990		Parts and accessories (Revolution counters, production counters, taximeters, mileometers, pedometers and the like; speed indicators and tachometers, other than those of heading 90.14 or 90.15; stroboscopes.)	
903010		Instruments and apparatus for measuring or detecting ionising radiations	
903020		Oscilloscopes and oscillographs	
903031		Multimeters without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903032		Multimeters with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903033		Other, without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903039		Other, with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903084		Other, with a recording device (Other instruments and apparatus)	
903089		Other (Other instruments and apparatus)	
903090		Parts and Accessories (Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 90.28; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionising radiations.)	
903110		Machines for balancing mechanical parts	
903120		Test benches	
903149		Other (Other optical instruments and appliances)	
903180		Other instruments, appliances and machines (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	
903190		Parts and Accessories (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	
	ex	Parts and accessories in 9031, except for parts for equipment for testing engines	There is more than one proposal for this HS code.
903210		Thermostats	
	ex	Thermostats for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.
903220		Manostats	
	ex	Manostats (automatic regulating or controlling instruments and apparatus) for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.
903281		Hydraulic or pneumatic (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	
	ex	Process control modules and complete systems	
	ex	Automatic regulating or controlling instruments and apparatus of hydraulic or pneumatic for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
903289		Other (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	There is more than one proposal for this HS code.
	ex	Other automatic regulating or controlling instruments and apparatus for manufacturing of semiconductors or flat panel displays	
903290		Parts and accessories (Automatic regulating or controlling instruments and apparatus.)	There is more than one proposal for this HS code.
	ex	Parts and accessories, except for parts of thermostats and manostats	
	ex	Parts and accessories (Automatic regulating or controlling instruments and apparatus.) for manufacturing of semiconductors or flat panel displays	
903300		Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.	There is more than one proposal for this HS code.
	ex	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90 for manufacturing of semiconductors or flat panel displays	
940510	ex	Chandeliers and other electric ceiling or wall lighting fittings using a LED light module as primary light source, excluding those of a kind used for lighting public open spaces or thoroughfares	
940520	ex	Electric table, desk, bedside or floor-standing lamps using a LED light module as primary light source	
940530	ex	Lighting sets of a kind used for Christmas trees using LED light modules as primary light source	
940540	ex	Other electric lamps and lighting fittings using a LED light module as primary light source	
940560	ex	Illuminated signs, illuminated name -plates and the like using a LED light module as primary light source	
940591	ex	Parts of glass for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
940592	ex	Parts of plastics for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
940599	ex	Other parts for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
950410		Video games of a kind used with a television receiver	
950430		Other games, operated by coins, banknotes, bank cards, tokens or by other means of payment, other than bowling alley equipment	
950490	ex	Video game machines capable of connecting to a wired or wireless network, whether or not portable, other than those of subheading 9504.10, and parts and accessories thereof	There is more than one proposal for this HS code.
	ex	Game machines other than coin-operated arcade games and parts and accessories including game controllers, game cartridges, cases, steering wheels, etc.; 'Parts' for hand-held gaming consoles	
	ex	Electronic games and parts of video, electronic games	
961210		Ribbons (Typewriter or similar ribbons, inked or otherwise prepared for giving impressions, whether or not on spools or in cartridges; ink -pads, whether or not inked, with or without boxes.)	

ATTACHMENT B - bis

Positive list of specific products proposed to be covered by this agreement wherever they are classified in the HS.

1	2
Description	Comments
Multi-chip integrated circuits (MCPs) consisting of two or more interconnected monolithic integrated circuits combined to all intents and purposes indivisibly, whether or not on one or more insulating substrates, with or without lead frames, but with no other active or passive circuit elements, wherever classified.	
Multi-component integrated circuits (MCOs), wherever classified	
<p>Multi-component integrated circuits (MCOs) are a combination of one or more monolithic, hybrid, and/or multi-chip integrated circuits with one or more componentsA classifiable under heading 8532, 8533 or 8541, inductors classifiable under heading 8504, or silicon based MEMSB; formed to all intents and purposes indivisibly into a single body like an integrated circuit, as a component of a kind used for assembly onto a printed circuit board (PCB) or other carrier, through the connecting of pins, leads, balls, lands, bumps, or pads.</p> <p>A: The components may be discrete, manufactured independently then assembled onto the rest of the MCO, or integrated into other components, so they are not outwardly visible.</p> <p>B: Silicon basediv MEMS includes silicon based sensors, actuators, oscillators, resonators and combinations thereof. Silicon based sensors consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantitiesi and transforming theseii into electric signals, caused by resulting variations[s] in electronic propertiesiii or displacement of a mechanical structure.</p> <p>Silicon based actuators consist of microelectronic and mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of transforming electrical signals into physical movement. Silicon based resonators and silicon based oscillators consists of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.</p> <p>i Physical quantities relating to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration etc.</p> <p>ii e.g. energy, mechanical displacement, photo-signals, etc.</p> <p>iii e.g. resistance, capacitance</p> <p>iv "Silicon based" refers to devices built on a silicon substrate, or made of silicon materials, or manufactured onto integrated circuit die</p>	<p>There is more than one proposal for this product.</p>
Set-top boxes, wherever classified	
Monitors, of liquid crystal display	
Liquid crystal modules	
LED(light-emitting diode) lamps	
LED(light-emitting diode) arrays	

APPENDIX B
***Federal Register* Notice**

SUPPLEMENTARY INFORMATION: On July 6, 2012, the Commission established a schedule for this expedited review (77 FR 42762, July 20, 2012). On July 31, 2012 (77 FR 45337), the Department of Commerce published a notice extending its time limits for issuing preliminary and final results in the second five-year review of the antidumping duty order on Folding Gift Boxes from China. Given this extension by Commerce, the date for the Commission's final determination is also extended pursuant to 19 U.S.C. 1675(c)(5)(B). Accordingly, the Commission is postponing the release of its staff report and final comment date until after Commerce's preliminary determination scheduled for October 19, 2012. At that time, the Commission will establish revised dates for the release of the report and the submission of final comments.

For further information concerning this review see the Commission's notice cited above and the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

Issued: August 8, 2012.

By order of the Commission.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2012-19792 Filed 8-10-12; 8:45 am]

BILLING CODE P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 332-532; Investigation No. 332-536]

The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1; The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2

AGENCY: United States International Trade Commission.

ACTION: Institution of investigations, opportunity to provide written submissions, and scheduling of public hearing in investigation No. 332-536.

SUMMARY: Following receipt of a request on July 31, 2012, from the United States Trade Representative (USTR) under section 115 of the Uruguay Round Agreements Act (19 U.S.C. 3524) and section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), the U.S. International Trade Commission

(Commission) instituted two investigations for the purpose of providing the requested advice and information: investigation No. 332-532, *The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1*, and investigation No. 332-536, *The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2*.

DATES:

Investigation No. 332-532

September 6, 2012: Deadline for filing written submissions from interested parties.

October 24, 2012: Transmittal of Commission's report to USTR.

Investigation No. 332-536

October 31, 2012: Deadline for filing requests to appear at the public hearing.

November 2, 2012: Deadline for filing pre-hearing briefs and statements.

November 8, 2012: Public hearing.

November 20, 2012: Deadline for filing post-hearing briefs and written submissions from interested parties.

February 15, 2013: Transmittal of the Commission's report to USTR.

ADDRESSES: All Commission offices, including the Commission's hearing rooms, are located in the United States International Trade Commission Building, 500 E Street SW., Washington, DC. All written submissions should be addressed to the Secretary, United States International Trade Commission, 500 E Street SW., Washington, DC 20436. The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at <https://edis.usitc.gov/edis3-internal/app>.

FOR FURTHER INFORMATION CONTACT:

Project Leader Shannon Gaffney (202-205-3316 or Shannon.Gaffney@usitc.gov) or Deputy Project Leaders Heidi Colby-Oizumi (202-205-3391 or Heidi.Colby@usitc.gov) or Jeanette Leary (202-205-2043 or Jeanette.Leary@usitc.gov) for information specific to these investigations. For information on the legal aspect of these investigations, contact William Gearhart of the Commission's Office of the General Counsel (202-205-3091 or william.gearhart@usitc.gov). The media should contact Margaret O'Laughlin, Office of External Relations (202-205-1819 or margaret.oloughlin@usitc.gov). Hearing-impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal at 202-205-1810. General information concerning the Commission may also be obtained by accessing its Internet server

(<http://www.usitc.gov>). Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

Background: In his letter the USTR said that a number of participants in the Information Technology Agreement (ITA) have prepared a draft list of products that could be considered for addition to ITA product coverage, and that a more formal negotiating process is expected to begin in September 2012.

The USTR furnished the Commission with a list of the products, which can be found at http://www.usitc.gov/research_and_analysis/ongoing/documents/Request_letter_332-532.pdf or http://www.usitc.gov/research_and_analysis/ongoing/documents/Request_letter_332-536.pdf. Section 115 of the URAA requires the President to obtain the advice of the Commission in connection with any modifications in duty that are subject to the consultation and layover requirements of section 115.

The USTR has asked the Commission to provide advice and information in two reports and the Commission has instituted two separate investigations for the purpose of preparing these reports.

Investigation No. 332-532, The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1

In its first report (investigation No. 332-352), the Commission will, as requested by the USTR and to the extent practicable, based on available information and information furnished by interested parties in response to this notice, (1) indicate both the information and communications technology (ICT) purposes and non-ICT purposes for which each product on the list is used, and (2) identify the products that U.S. industry and other interested parties view as import-sensitive. The Commission will provide this report to the USTR by October 24, 2012.

Investigation No. 332-536, The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2

In its second report (investigation No. 332-356), the Commission will, as requested by the USTR and to the extent practicable, identify for each of the listed products: (1) Tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports. The Commission will also provide an overview of selected key subsectors, and to the extent practicable, examine benefits to the U.S. industry of ITA

expansion, including information on increased market access and export opportunities for products in these subsectors. The Commission will provide this report to the USTR by February 15, 2013.

Public Hearing: A public hearing in connection with investigation No. 332-536 will be held at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC, beginning at 9:30 a.m. on November 8, 2012. Requests to appear at the public hearing should be filed with the Secretary no later than 5:15 p.m., October 31, 2012. All pre-hearing briefs and statements should be filed no later than 5:15 p.m. November 2, 2012; and all post-hearing briefs and statements should be filed no later than 5:15 p.m. November 20, 2012. All such briefs and statements should otherwise comply with the filing requirements in the "Submissions" section below. In the event that, as of the close of business on October 31, 2012, no witnesses are scheduled to appear at the hearing, the hearing will be canceled. Any person interested in attending the hearing as an observer or nonparticipant should contact the Office of the Secretary at 202-205-2000 after October 31, 2012, for information concerning whether the hearing will be held.

Written Submissions: Interested parties are invited to file written submissions concerning both investigations. For investigation No. 332-532, interested parties are asked to provide information on (1) the ICT and non-ICT purposes for which products on the attached list are used, and (2) indicate which products they view as import-sensitive. Written submissions relating to investigation No. 332-532 should be received not later than 5:15 p.m., September 6, 2012. Written submission relating to investigation No. 332-536 should be received not later than 5:15 p.m., November 20, 2012.

Written submissions filed in connection with the respective investigations should focus on providing information of the kind described above that is relevant to the respective investigations and reports. All written submissions should be addressed to the Secretary. All written submissions must conform to the provisions of section 201.8 of the Commission's *Rules of Practice and Procedure* (19 CFR 201.8). Section 201.8 and the Commission's Handbook on Filing Procedures require that interested parties file documents electronically on or before the filing deadline and submit eight (8) true paper copies by 12:00 noon eastern time on the next business day. In the event that confidential

treatment of a document is requested, interested parties must file, at the same time as the eight paper copies, at least four (4) additional true paper copies in which the confidential information must be deleted (see the following paragraph for further information regarding confidential business information). Persons with questions regarding electronic filing should contact the Secretary (202-205-2000).

Any submissions that contain confidential business information must also conform to the requirements of section 201.6 of the Commission's *Rules of Practice and Procedure* (19 CFR 201.6). Section 201.6 of the rules requires that the cover of the document and the individual pages be clearly marked as to whether they are the "confidential" or "non-confidential" version, and that the confidential business information be clearly identified by means of brackets. All written submissions, except for confidential business information, will be made available for inspection by interested parties.

In his request letter the USTR said that it is the intent of his office to make the Commission's reports available to the public in their entirety, and asked that the Commission not include any confidential business information. Accordingly, any confidential business information received by the Commission in these investigations and used in preparing the respective reports will not be included in the reports that the Commission sends to the USTR and will not be published in a manner that would reveal the operations of the firm supplying the information.

Issued: August 8, 2012.

By order of the Commission.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2012-19791 Filed 8-10-12; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[USITC SE-12-024]

Government in the Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING: United States International Trade Commission.

TIME AND DATE: August 21, 2012 at 9:30 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205-2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agendas for future meetings: None.
2. Minutes.
3. Ratification List.
4. Vote in Inv. No. 731-TA-709 (Third Review) (Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from Germany). The Commission is currently scheduled to transmit its determination and Commissioners' opinions to the Secretary of Commerce on or before August 30, 2012.

5. Outstanding action jackets: None.

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: August 8, 2012.

By order of the Commission.

William R. Bishop,

Hearings and Meetings Coordinator.

[FR Doc. 2012-19850 Filed 8-9-12; 11:15 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Pursuant to Comprehensive Environmental Response, Compensation, and Liability Act

Notice is hereby given that on August 6, 2012, a proposed Consent Decree in *United States of America v. The Gillette Company, et al.*, Civil Action No. 1:12-cv-01247-MAD-TWD, was lodged with the United States District Court for the Northern District of New York.

The proposed Consent Decree is between Plaintiff the United States of America, and the following Defendants: The Gillette Company; KeySpan Gas East Corporation (d/b/a National Grid); Energizer Battery Manufacturing, Inc.; Union Carbide Corporation; Spectrum Brands, Inc.; Brambles Environmental, Inc.; Clean Harbors Environmental Services, Inc.; Qwest Communications International, Inc.; Verizon New York, Inc.; 26 Railroad Ave., Inc.; A.P. Pharma, Inc.; Ajinomoto North America, Inc.; Allegheny Ludlum, LLC; Amresco, LLC; Arizona Chemical Company, LLC; Atmos Energy Corporation; Battery Broker Environmental Services, Inc.; Buffalo Optical Co.; Cameron International Corp.; Chemtron Corp.; City of Lakeland; City of North Tonawanda; City of Richmond; Dukane Corp.; East Side Jersey Dairy, Inc.; FirstEnergy Corp.; Glit, Division of CCP, LLC; Harding Metals, Inc.; Honeywell International, Inc.; Johnson Controls, Inc.; Los Angeles Unified School District; MDI, Inc.; Memphis Light, Gas & Water Division; Metalor Technologies

APPENDIX C
Positions of Interested Parties

Positions of Interested Parties

Interested parties were invited to file written submissions for the investigation. The views expressed in the summarized materials should be considered to be those of the submitting parties and not the Commission. In preparing this summary, Commission staff did not undertake to confirm the accuracy of, or otherwise correct, the information summarized. For the full text of written submissions, see entries associated with investigation no. 332-532 at the Commission's Electronic Docket Information System, or EDIS (<https://edis.usitc.gov/edis3-internal/app>).

*Alcatel-Lucent*¹

In a written submission, Alcatel-Lucent (France) stated that it is a leader in mobile, fixed, and Internet protocol communications and optics technologies, noting that Bell Labs, a preeminent research and innovation center in communications technology, is a subsidiary. Alcatel-Lucent said that it supports the expansion of the ITA for coaxial cable and other coaxial electric conductors (HS 8544.20) and for fans and fan trays, and parts thereof, for use in telecommunications and data processing systems (HS 8414.59 and HS 8414.90).

Alcatel-Lucent described coaxial cable as being made from an inner conductor surrounded by an insulating layer and enclosed by a shield, usually of woven metal fabric braid. Alcatel-Lucent said that the common ICT applications for coaxial cable include cable television, telephone, and computer networking systems. Alcatel-Lucent said it believes that there are no significant uses for coaxial cable outside of ICT technologies. Alcatel-Lucent also explained that fan trays usually consist of between two to six fans, electrical apparatuses that control the fans, and sheet metal frames that fit into exterior mounts. The fans are used to dissipate the heat generated by telecommunications products and automated data processing machines.

*Digital Lumens*²

In a written submission, Digital Lumens stated that it is a leader in developing next-generation LED technology. Digital Lumens said that it recently combined LED, networking, and software technologies into a breakthrough technology called the Intelligent Lighting System that will reportedly reduce customers' lighting-related energy use by up to 90 percent. Digital Lumens stated that it supports the inclusion of LED lighting fixtures in the expansion of the ITA.

Digital Lumens explained that LEDs contain semiconductor chips that produce light when electrical potential is run across them; LEDs are combined with drivers, thermal management systems, optical systems, and mechanical parts to produce the entire fixture. Digital Lumens listed two reasons why LED lighting fixtures should be included in the expansion of the ITA. First, LEDs were included in the original ITA; therefore, LED fixtures that incorporate the LED should likewise be included as products. Second, LED light fixtures function most effectively when combined with technology that regulates

¹ Alcatel-Lucent, written submission to the USITC, September 6, 2012.

² Digital Lumens, written submission to the USITC, August 31, 2012.

their energy output. Digital Lumens pointed out that LED fixtures contain semiconductor technology and often include technology-related components that ensure efficient operation of the fixtures. Digital Lumens asserted that this justifies saying that the product functions with an “information and technology” purpose.

Digital Lumens also stated that LED fixtures are important for overall energy reduction. New fixtures reportedly contain energy-saving technology using integrated controls and intelligence. Digital Lumens stated that a reduction in duties on LED fixtures will lead to lower prices for the consumer, lower overall energy consumption, and an increase in overall U.S. energy efficiency.

Entegris, Inc.³

In a written submission, Entegris, Inc. (Entegris) stated that it is a leading supplier of products and materials used in semiconductor and flat panel television screen manufacturing. Entegris said that it manufactures many of its products in the United States and exports 70 percent of them to semiconductor and other manufacturers around the world. Entegris further stated that it supports the expansion of the ITA with two minor caveats intended to restrict the product coverage to articles with identifiable ICT uses.

Entegris reported that it is the leading supplier of articles for the conveyance, packing, or shipping of semiconductor wafers, masks, and reticles (HS 3923.10), and proposed limiting the scope of these products in an expanded ITA only to those that are used in semiconductor manufacturing. Entegris stated that it is also a leading supplier of liquid and gas filters for semiconductor and flat panel display manufacturing, and parts thereof (HS 8421.29, HS 8421.39, and HS 8421.99), and supported the inclusion of these items in the ITA, albeit with a provision that the product description include a “solely and principally” use clause. Entegris asserted that both aforementioned products are not import sensitive.

Entegris listed the following items for inclusion in an expanded ITA and asserted that, to the best of its knowledge, none of the products are import sensitive: perfluoroalkoxy (PFA) fittings (HS 3917.40); PFA nuts (HS 3926.90); PTFE, PFA, UHMWPE (UPE), PES, and nylon fiber membranes with a pore rating of 0.15 microns or smaller (HS 3921.19); woven PFA filtration support materials (HS 5407.71); injection molds used to manufacture wafer shipping products (HS 8480.71); PFA check valves (HS 8481.30); and flow meters and controllers with PFA wetted surfaces (HS 9026.20).

Entertainment Software Association⁴

In a written submission, the Entertainment Software Association (ESA) stated that it is a U.S. association dedicated to serving the business and public affairs needs of companies that publish computer and video games, a multibillion-dollar industry that employs more than 120,000 people in the United States. ESA said that it supports the expansion of the ITA to include all entertainment software (HS 8523); all video game consoles and parts

³ Entegris, written submission to the USITC, September 5, 2012.

⁴ ESA, written submission to the USITC, September 6, 2012.

thereof (HS 9504.50); parts accessories and peripheral equipment of video games and video game software; and all documents of title, licenses to use software in printed form (ex HS 4907.00), coded key cards, stored-value point-of-sale activation cards, or licenses that are not documents of title (ex HS 4911.10 and ex HS 4911.99). ESA stated that these items are all specific IT products without non-IT uses and that they are not import sensitive. ESA also noted that coin-operated games (HS 9504.30) are IT products and are not import sensitive.

Intel⁵

In a written submission, Intel stated that it is a leading manufacturer of computer, communications, and networking products, with over 50,000 employees in the United States and global 2011 sales revenues of \$54 billion; it also stated that three-fourths of its total manufacturing takes place in the United States. Intel indicated that it supported the ITA as one of the WTO's most successful agreements and stated that it has enabled domestically manufactured products to be exported free of duty to many key markets.

Intel stated that it supports the inclusion of a large number of products in the ITA; said that none were import sensitive; and asserted that all served relevant IT uses.⁶ Intel stated that many of these products are parts used in the manufacture of semiconductors and microprocessors. Intel also commented that new packaging techniques for certain semiconductor devices known as multicomponent semiconductors (MCOs) should be included in future ITAs in spite of the fact that they have, to this point, been overlooked. Intel said that MCOs are the building blocks of the global digital infrastructure and that a failure to include them in future ITAs would result in significant challenges for U.S. companies, given the highly competitive nature of ICT markets.

National Electrical Manufacturers Association⁷

In a written submission, the National Electrical Manufacturers Association (NEMA) stated that it is an association of electrical equipment manufacturers with member companies that manufacture power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical diagnostic imaging systems. NEMA indicated that it generally favors reciprocal elimination of customs tariffs on products associated with its members and that it supports the expansion of the ITA. NEMA stated that it also supports the additional WTO initiatives on electrical and electronic equipment, industrial machinery, and medical equipment.

NEMA noted that the scope of the ITA has not necessarily expanded since it was first agreed upon in 1996 to keep pace with technological innovations. NEMA urged the WTO ITA Committee to pay special attention to supervisory control and data acquisition and other facility control systems in deciding upon the scope of the expanded agreement.

⁵ Intel, written submission to the USITC, September 6, 2012.

⁶ Specifically, Intel stated that it supported inclusion in the ITA products classified under the following HS subheadings: 3701.30, 3701.99, 3705.90, 8414.59, 8414.90, 8456.90, 8507.20, 8507.30, 8507.40, 8507.80, 8507.90, 8514.30, 8536.90, 8537.10, 8542.31, 8542.32, 8542.33, 8542.39, 9031.20, 9031.49, 9031.80, and 9031.90.

⁷ NEMA, written submission to the USITC, September 6, 2012.

NEMA also listed a large number of products that it said should be included in an expanded ITA and described their IT uses.⁸ However, NEMA objected to the inclusion of some products in the expanded ITA. NEMA noted that two products—electric motors and parts thereof (HS 8501 and 8503) and electrical transformers (HS 8504.21-31)—should not be included in the expanded ITA because of inherent challenges due to lack of differentiation between products intended for ICT and non-ICT uses. NEMA similarly stated that insulated wire and cable of copper, whether or not fitted with connectors (HS 8544.11), and insulated wire and cable not of copper, whether or not fitted with connectors (HS 8544.19), should only partially be included in the expanded ITA because these products have many non-ICT functions. NEMA also questioned the inclusion of insulated electric conductors for a voltage exceeding 1,000 V (HS 8544.60) on the grounds that this product has no ICT functions.

Rechargeable Battery Association⁹

In a written submission, the Rechargeable Battery Association (PRBA) stated that it is an industry association whose membership includes the vast majority of global producers of lithium-ion, nickel-cadmium, and nickel-metal hydride batteries. PRBA said that it favors the expansion of the ITA to cover all rechargeable cells and batteries, including rechargeable nickel-cadmium, lithium-ion, and nickel-metal hydride batteries.

PRBA stated that the batteries in question have the following ICT and non-ICT uses:

- Nickel-cadmium batteries have ICT uses in telecommunications as well as in portable electronics, and have non-ICT uses in rail and aviation products.
- Lithium-ion batteries have ICT uses in portable computers, cell phones, tablets, and smartphones and limited non-ICT uses in electric vehicles and rechargeable power tools.
- Nickel-metal hydride batteries have ICT uses in digital cameras, hand-held games, PDAs, portable music players, video devices, and toys and non-ICT uses in alkaline-battery based products and hybrid-electric vehicles.

PRBA indicated that it had not identified any import sensitivities with respect to any of these products.

PRBA requested that USTR ensure that all signatories adopt the WCO's subcategories for products in this area. PRBA also indicated that it is in favor of expanding the agreement to include rechargeable lithium-ion and nickel-metal hydride batteries under 2012 HS codes 8507.60 and 8507.50, which were not separate HS subheadings in the 2007 schedule. PRBA requested that future nomenclature for products be based on the 2012 HS codes to avoid confusion and because of the large size of the lithium-ion, nickel-cadmium, and nickel-metal hydride battery markets.

⁸ Specifically, NEMA stated that it supported inclusion in the ITA for products classified under the following HS subheadings: 8504.10, 8504.40, 8504.50, 8506.10, 8506.50, 8507.30 ex, 8507.40 ex, 8530.10, 8538.80, 8503.90, 8535.40, 8535.90, 8536.10, 8536.20, 8536.30, 8536.41 ex, 8536.49 ex, 8537.10, 8537.20, 8544.11 (partial), 8544.19 (partial), 8544.20, 8544.42, 8544.49, 9018.12, 9018.13, 9018.14, 9022.12, 9022.19, 9022.21, 9022.30, 9022.90, 9028.30, 9028.90, 9032.10, 9032.81, and 9032.90.

⁹ PRBA, written submission to the USITC, September 10, 2012.

Stryker Corporation¹⁰

In a written submission, Stryker Corporation (Stryker) stated that it is a leading medical technology company with 21,000 employees, most of whom are in the United States. Stryker indicated that its subsidiary, Stryker Communications, manufactures Visum Surgical Light Systems, a lighting system marketed to hospitals and doctors' offices because of its unique pure white light combined with a digital camera installed for video recording. Stryker requested that these digital video cameras (HS 8525.80) be included in the expanded ITA. Stryker also requested that the following products be included in the expanded ITA because, while they can currently be imported into the United States duty-free, certain export markets still impose duties upon them, thereby harming U.S. companies: electro-diagnostic apparatus (HS 9018.19), instruments and appliances used in dental services (HS 9018.49), and electro-medical and electro-surgical instruments and appliances (HS 9018.90). Stryker characterized such goods as "medical information and communications technology products."¹¹

The Tech Industry Coalition¹²

In a written submission, the U.S. Technology Industry, a group comprising the Business Software Alliance, the Consumer Electronics Association, ESA, the Information Technology Industry Council, NEMA, Semiconductor Equipment and Materials International, the Semiconductor Industry Association, the Software & Information Industry Association, TechAmerica, and the Telecommunications Industry Association, stated that the products its members proposed for the ITA in a 2011 submission to the USTR have substantial ICT uses and should be included in the expanded ITA.

The U.S. Technology Industry identified several categories of products that should be included in the new ITA, but also expressed the view that many products, though embedded with ICT technologies, are not necessarily ICT products. The U.S. Technology Industry listed the following categories as necessary additions to the ITA.

- Audio and video devices, including teleconferencing technologies;
- GPS technologies;
- Scientific, medical, and analytical instruments such as flow meters, chromatographs, and spectrometers, along with measuring and checking instruments for telecommunications;
- Manufacturing equipment and materials such as new semiconductor materials and inks and toners for printers;
- Parts, components, and accessories, including MCOs and MCPs.

Additionally, the U.S. Technology Industry said that none of the products it proposed in its 2011 submission to the USTR were import sensitive. The U.S. Technology Industry further listed multiple changes in 2012 HS codes for relevant products. It also said that all monitors, regardless of size or use, should be included in the expanded version of the ITA.

¹⁰ Stryker, written submission to the USITC, September 6, 2012.

¹¹ Stryker, written submission to the USITC, September 6, 2012, 2.

¹² Tech Industry Coalition, written submission to the USITC, September 6, 2012.

