

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC 20436

MEMORANDUM TO THE COMMITTEE ON FINANCE OF THE UNITED STATES
SENATE ON PROPOSED TARIFF LEGISLATION ¹

[Date approved: August 30, 2000]²

Bill No.: S. 2648; 106th Congress

Introduced by: Mr. Coverdell

Similar and/or related³ bills: This bill would reclassify all DVD production machinery under HTS subheadings 8477.10.40 or 8479.89.85; therefore, it would affect all individual bills dealing with this machinery including S. 2646-2664. (See the table following technical comments for a summary of all bills regarding DVD manufacturing equipment.) See also H.R. 3778 (withdrawn).

Summary of the bill:⁴

The bill would amend, on a permanent basis, chapter 84 of the Harmonized Tariff Schedule to provide duty-free treatment for, and clarify the classification of, machines and components used in the manufacture of digital versatile discs (DVDs).

Effective: The 15th day after the date of enactment.

Through: n/a

Retroactive effect: None.

[The remainder of this memorandum is organized in five parts: (1) information about the bill's proponent(s) and the product which is the subject of this bill; (2) information about the bill's revenue effect; (3) contacts by Commission staff during preparation of this memorandum; (4) information about the domestic industry (if any); and (5) technical comments.]

¹ International trade analyst: Melani Schultz (202-205-3436); attorney: Jan Summers (202-205-2605).

² Access to an electronic copy of this memorandum is available at <http://www.usitc.gov/billrpts.htm>. Access to a paper copy is available at the Commission's Law Library (202-205-3287) or at the Commission's Main Library (202-205-2630).

³ "Similar bills" are bills in the other House, in the current Congress, which address, at least in part, the substance of this bill. "Related bills" are bills in the **same** House, in the current Congress, but which are either earlier (or later) in time than the bill which is the subject of this memorandum.

⁴ The product nomenclature is as set forth in the bill. See technical comments for suggested changes (if any).

– THE PROPONENT AND THE IMPORTED PRODUCT –

The proponent firm/organization(s)			
Name of firm	Location contacted (city/state)	Date contacted	Response (Y/N) ⁵
Panasonic	Washington, DC	April 5, 2000	Y
Toolex represented by Collier, Shannon, Rill & Scott	Washington, DC	April 5, 2000	Y
International Electronics Manufacturers and Consumers of America, Inc.	Washington, DC	April 5, 2000	Y
JVC Disc America Co.	Elk Grove, CA	May 1, 2000	Y

Note: JVC is a member of IEMCA. Therefore, it has been included as a proponent of the bill. JVC's submission can be found in appendix C.

*Does the proponent plan **any** further processing or handling⁶ of the subject product after importation to its facilities in the United States (Y/N):* Yes, prior to resale.

If "Yes," provide location of this facility if different from above (city/state): See below.

Panasonic's headquarters is in Osaka, Japan; its U.S. corporate headquarters is in Secaucus, NJ. Panasonic's factory automation division in Elgin, IL imports the machinery to be assembled into DVD manufacturing systems.

Toolex imports the machinery to be assembled into DVD manufacturing systems in a recently purchased facility in Irvine, CA.

If "No," provide location of proponent's headquarters or other principal facility if different from above (city/state): See below.

IEMCA is a Washington, DC trade association representing electronics manufacturers and consumers.

JVC imports DVD production machinery to manufacture DVDs in Sacramento, CA.

⁵ Non-confidential written responses received prior to approval of this report by the Commission, if any, will be included in appendix C.

⁶ The phrase "further processing or handling" can include repackaging, storage or warehousing for resale, etc.

The imported product	
Description and uses	Country(s) of origin

The imported product

This bill covers mastering and replication machinery including ashing machines, lapping machines, center hole punching machines, glass polishing machines, glass cleaning machines, in-line system machines, laser encoder machines, electrolytic plating machines, electrolytic cleaning machines, injection molding machines, coating machines, bonding machines, molds, stackers, aluminum sputters, gold sputters, control panels, interface units, and optical laser scanners.

The DVD manufacturing process comprises 2 major stages. The first is mastering, in which the glass master is prepared. The machines used in this stage include ashing, lapping, center hole punch, glass polishing, in-line system, laser encoder, electrolytic plating and electrolytic cleaning machines. The glass disc is chemically cleaned and mechanically polished using a grinding pad, coated with a light-sensitive photoresist material (or dye-polymer) to a precise thickness, and oven baked. Either in-line or modular mastering systems can be designed. The newly created glass master is then transferred to the laser beam recorder. The recording machine modulates the laser to record information onto the photoresist surface, creating a layer of digitally recorded information. Depending on the manufacturer, this machine may perform this process to encode a CD or a DVD master with few or no adjustments. The glass master is rinsed with a developing solution, leaving a series of digitally encoded pits in the surface of the photoresist. (This step is not needed if a dye polymer is used.) A sputter coater machine then deposits a thin film of nickel coating onto the surface of the master, which is then lowered into an electrolytic plating bath. The electrolytic nickel layer of bumps, removed from the master disc, is called a "stamper." An ashing machine cleans the stamper's surface, a lapping machine polishes the stamper, and a center hole is punched in the stamper to complete the mastering process.

The replication process, making copies from the master or "stamper", has three major separate operations. In the molding process the stamper is installed in a custom DVD mold and, using an injection molding machine, is covered with a polycarbonate resin to replicate the layer of bumps as pits in the plastic substrate. Now the molded substrate is an exact copy of the original master. The substrates are metalized with a reflective metal coating. Each single-sided replica is sputter coated with a reflective coating of aluminum. Single layer discs are bonded with adhesive onto a clear plastic disc, and dual-layer discs are bonded onto a fully reflective aluminum substrate. Double-sided replicas are sputter coated with gold on one side and aluminum on the other and stacked on separate spindles for the final bonding process. Once the two substrates have been tempered, the bonding process dispenses an adhesive onto the surface of one of the replicas. The final DVD is "cured" using UV light to create a permanent bond. An optical inspection machine or laser scanner checks each disc for defects. After labeling the DVDs are boxed and wrapped.

United Kingdom,
Netherlands,
Japan, Germany,
Italy,
Liechtenstein,
Sweden,
Switzerland

– EFFECT ON CUSTOMS REVENUE –

[*Note: This section is divided in two parts. The first table addresses the effect on customs revenue based on the duty rate for the HTS number set out in the bill. The second table addresses the effect on customs revenue based on the duty rate for the HTS number recommended by the Commission (if a different number has been recommended). Five-year estimates are given based on Congressional Budget Office “scoring” guidelines. If the indicated duty rate is subject to “staging” during the duty suspension period, the rate for each period is stated separately.*]

HTS number used in the bill: 8479.89.97 goods reclassified under 8477.10.40 and 8479.89.85⁷					
	2001	2002	2003	2004	2005
General rate of duty ⁸ (AVE) ⁹	2.5	2.5	2.5	2.5	2.5
Estimated value <i>dutiable</i> imports	\$221,411,300	\$184,284,400	\$73,578,750	\$73,578,750	\$73,578,750
Customs revenue loss	\$6,689,409	\$5,574,508	\$2,229,804	\$2,229,804	\$2,229,804

Note: Estimated value of dutiable imports calculated based upon industry estimates of imports, prices, and projected number of mastering and replicating lines. The machinery included in the estimates includes in-line mastering, in-line replicating, electroforming, ashing, lapping, and punching equipment. Customs revenue loss is estimated value of dutiable imports times the general rate of duty. See technical comments for further explanation of revenue loss estimates.

HTS number recommended by the Commission: n/a¹⁰					
	2001	2002	2003	2004	2005
General rate of duty (AVE)					
Estimated value <i>dutiable</i> imports					

⁷ The HTS number is as set forth in the bill. See technical comments for suggested changes (if any).

⁸ See appendix B for column 1-special and column 2 duty rates.

⁹ AVE is ad valorem equivalent expressed as percent. Staged rates may be found at: <http://dataweb.usitc.gov>

¹⁰ If a different HTS number is recommended, see technical comments.

HTS number recommended by the Commission: n/a ¹⁰					
Customs revenue loss					

– CONTACTS WITH OTHER FIRMS/ORGANIZATIONS –

Contacts with firms or organizations <i>other than</i> the proponents			
Name of firm	Location contacted (city/state)	Date contacted	Response (Y/N) ¹¹
Optical Storage Technology Association (OSTA)	Santa Barbara, CA	April 5, 2000	N
The DVD Association (DVDA) & Interactive Digital Media Association (IDMA)	Solon, OH	April 5, 2000	N
DVD Forum	Tokyo, Japan	April 5, 2000	N
International Optical Disc Replicators Association (IODRA)	Geneva, Switzerland	April 5, 2000	N
Steag HamaTech, Inc.	Saco, ME	April 6, 2000	N
Multi Media Machinery, Inc. (4M)	Santa Clara, CA	April 7, 2000	N
D'Onofrio & Associates, for the International Optical Disc Replicators Association (IODRA)	Washington, DC	April 10, 2000	N
Sumitomo–SHI Plastics Machinery Inc. of America	Norcross, GA	April 12, 2000	N
Marubeni Disc Systems	Southfield, Michigan	April 12, 2000	N
M2 Gauss Corporation	Valencia, CA	April 12, 2000	N
Toolex International/USA	Irvine, CA/Hilliard, OH	April 13, 2000	N

¹¹ Non-confidential written responses received prior to approval of this report by the Commission, if any, will be included in appendix D. Only statements submitted in connection with **this** bill will be included in the appendix.

Contacts with firms or organizations <i>other than</i> the proponents			
Optical Disc Manufacturing Association	Monmouthshire, UK	April 14, 2000	N
Optical Disc Corporation	Santa Fe Springs, CA	April 19, 2000	Y
Digital Matrix Corporation	Hempstead, NY	April 21, 2000	Y
Record Products of America	Hamden, CT	April 21, 2000	N
Reflekt	Concord, MA	April 21, 2000	N
Reynolds Tech	East Syracuse, NY	April 21, 2000	N
Technotrans America, Inc.	Chicago, IL	April 24, 2000	N
Convac (formerly Fairchild Technologies)	Fremont, CA	April 24, 2000	N
U.S. Customs	New York, NY	April 24, 2000	N
Doug Carson Associates	Cushing, OK	April 25, 2000	N
Lasertown Video Discs, Inc.	Kulpsville, PA	April 27, 2000	N
Image Entertainment	Chatsworth, CA	April 27, 2000	N
Warner Advanced Media Operations (WAMO)	Olyphant, PA	April 25, 2000	Y
Singulus	Victorville, CA	May 1, 2000	Y
Sony	Woodcliff Lake, NJ	May 1, 2000	N
CD Associates	Irvine, CA	May 16, 2000	Y
Georgetown Economic Services	Washington, DC	May 20, 2000	N

– THE DOMESTIC INDUSTRY –

*[Note: This section is divided in two parts. The first part lists non-confidential written submissions received by the Commission which assert that **the imported product itself** is produced in the United States and freely offered for sale under standard commercial terms. The second part lists non-confidential written submissions received by the Commission which assert either that (1) the imported product will be produced in the United States in the future; or (2) another product which **may compete** with the imported product is (or will be) produced in the United States and freely offered for sale under standard commercial terms. All submissions received by the Commission in connection with this bill prior to approval of the report will be included in appendix D. The Commission cannot, in the context of this memorandum, make any statement concerning the validity of these claims.]*

Statements concerning current U.S. production			
Name of product	Name of firm	Location of U.S. production facility	Date received
Mastering system ¹ and glass cleaning machines	Optical Disc Corporation	Santa Fe Springs, CA	April 26, 2000
Electroforming/mastering system ²	Digital Matrix	Hempstead, NY	April 25, 2000
DVD test equipment ³	CD Associates	Irvine, CA	May 16, 2000

¹Optical Disc Corp. produces and sells mastering systems, and although it does not produce backsanders for DVD/CD production, it does purchase this machinery for inclusion into the mastering systems it sells because it is integral to providing a mastering system to customers. See appendix D for ODC's statement.

²Digital Matrix produces electroforming equipment including electrolytic plating and cleaning machines. See appendix D for Digital Matrix's statement.

³CD Associates manufactures DVD and CD test equipment. See attachment D for CD Associates statement.

Statements concerning "future" or "competitive" U.S. production			
Name of product	Name of firm	Location of U.S. production facility	Date received
Mastering system ¹ and glass cleaning machines	Optical Disc Corporation	Santa Fe Springs, CA	April 26, 2000
Mastering and replication systems ²	Toolex USA, Inc.	Irvine, CA	May 1, 2000
Electroforming/mastering system ³	Digital Matrix	Hempstead, NY	April 25, 2000
DVD test equipment ⁴	CD Associates	Irvine, CA	May 16, 2000

¹Optical Disc Corp. produces and sells mastering systems; and although it does not produce backsanders for DVD/CD production, it does purchase this machinery for inclusion into the mastering systems it sells, because the machinery is integral to providing a mastering system to customers. See appendix D for ODC's statement.

²Toolex USA, Inc., produces and sells mastering and replication systems, and claims that it will be expanding its facilities

in the United States to manufacture and assemble this equipment. See appendix C for Toolex’s statement.

³Digital Matrix produces electroforming equipment including electrolytic plating and cleaning machines. See appendix D for Digital Matrix’s statement.

⁴CD Associates manufactures DVD and CD test equipment. See attachment D for CD Associates statement.

– TECHNICAL COMMENTS –

*[The Commission notes that references to HTS numbers in temporary duty suspensions (i.e., proposed amendments to subchapter II of chapter 99 of the HTS) should be limited to **eight** rather than ten digits. Ten-digit numbers are established by the Committee for Statistical Annotation of Tariff Schedules pursuant to 19 U.S.C. 1484(f) and are not generally referenced in statutory enactments.]*

Recommended changes to the nomenclature in the bill:

First, the existing tariff subheadings now contain machinery for use in the manufacture of video laser discs, which reportedly are no longer being made or sold (having been rendered obsolete by DVDs). Nonetheless, there remains a possibility that such machinery could be entered into the United States. The rates of duty and duty staging for these tariff categories were set during the Uruguay Round of tariff negotiations, so that if these two provisions were amended to exclude these articles their continued duty-free status could not be assured. Accordingly, it is suggested that, rather than deleting the existing products from the article descriptions, it would be preferable to add the bill’s products to the scope of each subheading. Subsection (a) should be amended so that the language after “amended by” is stricken and the phrase “and digital versatile discs” is inserted after “amended by”. The newer technology can be accommodated within the scope of the duty-free tariff category without adversely affecting any older machines.

Second, we note as a legal matter that the United States lacks authority to add a domestic legal note that attempts to set the scope of a U.S. 8-digit tariff rate line in a manner that, by its own wording (“notwithstanding notes 2, 3, and 4 of section XVI”) would contravene provisions of the Harmonized System (HS), the international nomenclature structure adopted by treaty upon which our tariff is based. Moreover, because the HTS is a hierarchical structure, goods are first classified at the 4- and 6-digit international level, under the terms of these notes and other provisions of the HS, and only when the correct 4- and 6-digit provision for each good, in its condition as imported, is identified can the United States provide 8-digit rate lines to set its duty treatment. Thus, if a good falls in a particular 4- and 6-digit provision, the rules of the hierarchy require the good’s inclusion in the subordinate 8-digit provisions we might create for duty purposes—categories whose combined product scope is that of the 6-digit provision. By contrast, the United States cannot unilaterally define the article description at the 8-digit level to expand the scope of the superior international provisions. Given these legal constraints, we suggest that the draft additional U.S. note should not be included in chapter 84 and will not comment further on its language. The permissible alternative is to create a precisely delineated category for each product of interest, with the desired rate of duty, at the 8-digit level below each 6-digit class where the good in question is properly classified. It is suggested that the Customs Service would need to be involved in such a drafting process. We note as well that the customs treatment of a shipment can differ greatly depending upon whether it is entered as individual machines (which could come from different countries and have different rates of duty—and perhaps different antidumping or countervailing

duties) or as an entirety, and that it seems unwise to allow the importer in every case to decide how the shipment is to be entered. Obviously, there would be a great financial incentive to choose the lowest rate of duty available for each article, and the government's ability to enforce existing customs and tariff treatment and to collect accurate statistics would seem likely to be undermined by such an uncontrolled choice.

Recommended changes to any C.A.S. numbers in the bill (if given):

None.

Recommended changes to any Color Index names in the bill (if given):

None.

*Basis for recommended changes to the HTS number used in the bill:*¹²

n/a

Other technical comments (if any):

It is important to note that several manufacturers (domestic and foreign) have indicated that much of the machinery is produced to be used in either CD or DVD production. While DVD-only production equipment is available, this machinery is not currently the majority of production equipment sold. Revenue loss estimates are based on equipment used only in DVD production and assuming inclusion of a use provision in the bill. Although this is somewhat burdensome, specifying the products' use is likely to be the only way that the scope of the duty suspension can be restricted to the subject machines. While it is virtually impossible for U.S. Customs to distinguish between machinery used in CD versus DVD production based on its physical characteristics, it is unlikely that these machines would be imported for CD production only based on machinery price differentials. For example, a CD/DVD replication line may cost at least three times as much as a CD replication line.

Industry representatives point out that the majority of companies stopped producing VLDs in 1999 and the beginning of 2000. There is no longer any U.S. production and only one known foreign producer. Further, current imports (if there are any) are expected to diminish to zero over time as the older technology is totally replaced with the newer technology. DVDs are considered the next generation technology although the manufacturing processes are quite different. DVDs are meant to be a smaller, cheaper, and more market accessible version of VLDs.

The estimate of total revenue loss will not equal the sum of the revenue loss for each of the individual bills. Estimates for individual machines were based on prices of those machines sold individually, whereas this bill's estimate was based on the price of each complete mastering (including electroforming equipment) complete replicating line consisting of various DVD manufacturing machinery. Often, discounts are offered for package purchases which include

¹² The Commission may express an opinion concerning the HTS classification of a product to facilitate the Committee's consideration of the bill, but the Commission also notes that, by law, the U.S. Customs Service is the only agency authorized to issue a binding ruling on this question. The Commission believes that the U.S. Customs Service should be consulted prior to enactment of the bill.

multiple pieces of machinery.

The table on the following page summarizes all House bills regarding DVD manufacturing equipment. As shown in the table, certain machinery used in DVD production (denoted by “NA” for “not applicable” in the “Bill No.” column) was not captured in the proposed bills.

Proposed legislation related to DVD production machinery, July 2000

DVD production process	Bill No.	Machine(s) used in DVD production	Harmonized Tariff System (HTS) subheading	2000 duty rate (percent ad valorem)	Related bills, No.	U.S. Producer/s
Complete Process—Mastering and Replicating	H.R. 3778 S. 2648	Rename HTS for DVD production machinery. Reclassifies all machines listed below for which there is a bill into either HTS 8477.10.40 (injection molding machines) or 8479.89.85 (machines for DVD production)	8477.10.40 8479.89.85	Free	H.R. 3779-3795 S. 2647-2664	All companies listed below.
Mastering	H.R. 3780 S. 2646; S. 2664	In-line system machine (typically includes the following stations: glass cleaning, glass polishing, coating, baking, inspection, laser encoding, developing, and nickel sputter coating) See also in-line replication system machine below.	8479.89.97 9013.80.90	2.5 4.5	H.R. 3778 / S. 2648 H.R. 3787 / S. 2655 H.R. 3785 / S. 2653 H.R. 3788 / S. 2656 H.R. 3795 / S. 2663 H.R. 3782 / S. 2650	Optical Disc Corporation (ODC) ¹³
Mastering	H.R. 3787 S. 2655	Glass cleaning machine for recycling/recovering glass substrate	8464.90.90	2.0	H.R. 3778 / S. 2648 H.R. 3780 / S. 2646	ODC Reynolds Tech
Mastering	H.R. 3785 S. 2653	Polishing of glass substrates, done periodically	8464.20.50	2.0	H.R. 3778 / S. 2648 H.R. 3780 / S. 2646	ODC
Mastering	H.R. 3788 S. 2656	Coating machine (photo-resist or dye-polymer)	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3780 / S. 2646	ODC
Mastering	NA	Baking station	NA	NA	NA	ODC
Mastering	H.R. 3795 S. 2663	Inspection for defects and measurement of thickness	9031.49.90	3.5	H.R. 3778 / S. 2648 H.R. 3780 / S. 2646	Integral Vision, Inc. ODC
Mastering	H.R. 3782 S. 2650	Laser encoder machine	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3780 / S. 2646	ODC

¹³ Although ODC does not claim to produce all of the components included in a mastering system, it does sell a complete system including all the items listed under mastering.

DVD production process	Bill No.	Machine(s) used in DVD production	Harmonized Tariff System (HTS) subheading	2000 duty rate (percent ad valorem)	Related bills, No.	U.S. Producer/s
Mastering	NA	Developer machine to develop areas of the glass disc exposed by the laser encoder (If dye-polymer is used to coat the disc this stage is skipped.)	NA	NA	NA	
Mastering	NA	Nickel/silver sputter coating to produce a metallized disc that conducts electricity in the electroforming stage	NA	NA	NA	
Electroforming (Mastering)	H.R. 3784 S. 2652	Electrolytic plating—charged nickel sulphamate bath to grow metal layers	8543.30.00	2.6	H.R. 3778 / S. 2648 H.R. 3786 / S. 2654	Digital Matrix Reflekt, Inc. Reynolds Tech Technotrans America, Inc.
Electroforming (Mastering)	H.R. 3786 S. 2654	Electrolytic cleaning of nickel master or stamper	8543.89.96	2.6	H.R. 3778 / S. 2648 H.R. 3784 / S. 2652	Digital Matrix Reflekt, Inc. Reynolds Tech Technotrans America, Inc.
Electroforming (Mastering)	H.R. 3779 S. 2647	Plasma-etch to remove photo-resist from nickel stamper (“ashing machine”)	8456.99.90	2.2	H.R. 3778 / S. 2648	Anatech LTD MetroLine Industries Nordson Corp (March Instruments, Advanced Plasma Systems) Yield Engineering Systems
Mastering finishing	H.R. 3781 S. 2649	Lapping machine to sand/finish back of nickel stamper (“backsander”)	8460.40.40	4.4	H.R. 3778 / S. 2648	Record Products of America (RPA)

DVD production process	Bill No.	Machine(s) used in DVD production	Harmonized Tariff System (HTS) subheading	2000 duty rate (percent ad valorem)	Related bills, No.	U.S. Producer/s
Mastering finishing	H.R. 3783 S. 2651	Center hole and outside diameter punching of nickel stamper	8462.41.00	4.4	H.R. 3778 / S. 2648	RPA
Note: Mastering systems may be in-line or modular. Mastering systems are often sold in two packages including a mastering package and electroforming package. Additionally, ashing machines may be sold separately from the electroforming package.						
Replication	H.R. 3789 S. 2657	Injection molding of DVD disc (molding of DVDs against the stamper)	8477.10.90	3.1	H.R. 3778 / S. 2648 H.R. 3794 / S. 2662	
Replication	H.R. 3794 S. 2662	DVD mold	8480.79.90	3.1	H.R. 3778 / S. 2648 H.R. 3789 / S. 2657	
Replication	H.R. 3780 S. 2646; S. 2664	In-line system machine (in-line replication machine typically includes the following stations: cooling/feeder, metallizing, bonding, curing, inspection and sorting.) See also In-line mastering system machine above.	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3788 / S. 2656 H.R. 3790 / S. 2658 H.R. 3791 / S. 2659 H.R. 3792 / S. 2660 H.R. 3793 / S. 2661 H.R. 3795 / S. 2663	Steag Hamatech, Inc. (Steag) ¹⁴
Replication	NA	Cooling/feed unit—transfers the molded replicas to the metallizer units	NA	NA	NA	Steag
Replication	H.R. 3793 S. 2661	Sputter (or spin) aluminum on DVD disc	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3792 / S. 2660	
Replication (DVD-9)	H.R. 3792 S. 2660	Sputter (or spin) gold (or silicon) on DVD disc	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3793 / S. 2661	

¹⁴ In February 2000, German company Steag Hamatech, Inc. purchased First Light located in Seco, Maine, and continues to produce replication equipment for the production of DVDs. According to industry representatives, Steag has a large market share in CD-R (recordable CDs) production machinery but has not had much success with its DVD production machinery.

DVD production process	Bill No.	Machine(s) used in DVD production	Harmonized Tariff System (HTS) subheading	2000 duty rate (percent ad valorem)	Related bills, No.	U.S. Producer/s
Replication	H.R. 3788 S. 2656	Coating machine—laquer coating used as bonding agent	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3790 / S. 2658	Steag
Replication (DVD-only)	H.R. 3790 S. 2658	Bonding machine	8479.89.97	2.5	H.R. 3778 / S. 2648 H.R. 3788 / S. 2656	Steag
Replication	NA	UV curing station	NA	NA	NA	
Replication	H.R. 3795 S. 2663	Inspection machine/optical laser scanner—Data Verification System test (DVS)	9031.49.90	3.5	H.R. 3778 / S. 2648	Integral Vision Inc.
Replication	NA	Electrical Test—signal verification test	NA	NA	NA	CD Associates ¹⁵
Replication	H.R. 3791 S. 2659	Stacker machine	8479.89.97	2.5	H.R. 3778 / S. 2648	Staeag
<p>Note: Most, if not all, replication machinery is in-line. Although the testing machinery is listed near the end of the replication process, it may be used throughout the production process. Additional tests may also be conducted, including environmental tests such as storage tests and heat cycle tests used to ensure longevity of the DVDs.</p>						

NA—Not applicable. Existing draft bills, including H.R. 3778 and S. 2648 encompassing all DVD production machinery, omit certain machinery integral to DVD production.

¹⁵ CD Associates produces machinery that verifies the performance of the replica DVD or the stamper produced at the end of the mastering process. While its equipment is not directly contained in any of the bills listed, the equipment is may be bundled with other replication equipment and sold together.

APPENDIX A

TARIFF AND TRADE AGREEMENT TERMS

In the **Harmonized Tariff Schedule of the United States** (HTS), chapters 1 through 97 cover all goods in trade and incorporate in the tariff nomenclature the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description. Subordinate 8-digit product subdivisions, either enacted by Congress or proclaimed by the President, allow more narrowly applicable duty rates; 10-digit administrative statistical reporting numbers provide data of national interest. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively. The HTS replaced the **Tariff Schedules of the United States** (TSUS) effective January 1, 1989.

Duty rates in the **general** subcolumn of HTS column 1 are normal trade relations rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those listed in HTS general note 3(b) (Afghanistan, Cuba, Laos, North Korea, and Vietnam) plus Serbia and Montenegro, which are subject to the statutory rates set forth in **column 2**. Specified goods from designated general-rate countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the **special** subcolumn of HTS rate of duty column 1 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at column 1-general rates. The HTS does not enumerate those countries as to which a total or partial embargo has been declared.

The **Generalized System of Preferences** (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 for 10 years and extended several times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of September 30, 2001. Indicated by the symbol "A", "A*", or "A+" in the special subcolumn, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 4 to the HTS.

The **Caribbean Basin Economic Recovery Act** (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984. Indicated by the symbol "E" or "E*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the **United States-Israel Free Trade Area Implementation Act** of 1985 (IFTA), as provided in general note 8 to the HTS.

Preferential nonreciprocal duty-free or reduced-duty treatment in the special subcolumn followed by the symbol "J" or "J*" in parentheses is afforded to eligible articles the product of designated beneficiary countries under the

Andean Trade Preference Act (ATPA), enacted as title II of Public Law 102-182 and implemented by Presidential Proclamation 6455 of July 2, 1992 (effective July 22, 1992), as set forth in general note 11 to the HTS.

Preferential free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and rates followed by the symbol "MX" are applicable to eligible goods of Mexico, under the **North American Free Trade Agreement**, as provided in general note 12 to the HTS and implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993. Goods must originate in the NAFTA region under rules set forth in general note 12(t) and meet other requirements of the note and applicable regulations.

Other special tariff treatment applies to particular **products of insular possessions** (general note 3(a)(iv)), **products of the West Bank and Gaza Strip** (general note 3(a)(v)), goods covered by the **Automotive Products Trade Act** (APTA) (general note 5) and the **Agreement on Trade in Civil Aircraft** (ATCA) (general note 6), **articles imported from freely associated states** (general note 10), **pharmaceutical products** (general note 13), and **intermediate chemicals for dyes** (general note 14).

The **General Agreement on Tariffs and Trade 1994** (GATT 1994), pursuant to the Agreement Establishing the World Trade Organization, is based upon the earlier GATT 1947 (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) as the primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX. Pursuant to the **Agreement on Textiles and Clothing** (ATC) of the GATT 1994, member countries are phasing out restrictions on imports under the prior "Arrangement Regarding International Trade in Textiles" (known as the **Multifiber Arrangement** (MFA)). Under the MFA, which was a departure from GATT 1947 provisions, importing and exporting countries negotiated bilateral agreements limiting textile and apparel shipments, and importing countries could take unilateral action in the absence or violation of an agreement. Quantitative limits had been established on imported textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries. The ATC establishes notification and safeguard procedures, along with other rules concerning the customs treatment of textile and apparel shipments, and calls for the eventual complete integration of this sector into the GATT 1994 over a ten-year period, or by Jan. 1, 2005.

APPENDIX B

**SELECTED PORTIONS OF THE
HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES**

[Note: Appendix may not be included in the electronic version of this memorandum.]

APPENDIX C

STATEMENTS SUBMITTED BY THE PROPONENTS

[Note: Appendix C may not be included in the electronic version of this memorandum posted on the Commission's web site if an electronic copy of the statement was not received by the Commission.]

APPENDIX D

STATEMENTS SUBMITTED BY OTHER FIRMS/ORGANIZATIONS

[Note: Appendix D may not be included in the electronic version of this memorandum posted on the Commission's web site if an electronic copy of the statement was not received by the Commission.]

106TH CONGRESS
2D SESSION

S. 2648

To amend the Harmonized Tariff Schedule of the United States to provide duty-free treatment for, and clarify the classification of, machines and components used in the manufacture of digital versatile discs (DVDs).

IN THE SENATE OF THE UNITED STATES

MAY 25, 2000

Mr. COVERDELL introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To amend the Harmonized Tariff Schedule of the United States to provide duty-free treatment for, and clarify the classification of, machines and components used in the manufacture of digital versatile discs (DVDs).

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. DUTY-FREE TREATMENT FOR MACHINES AND**
4 **COMPONENTS USED IN THE MANUFACTURE**
5 **OF DVDS.**

6 (a) IN GENERAL.—Subheadings 8477.10.40 and
7 8479.89.85 of the Harmonized Tariff Schedule of the

1 United States are each amended by striking “video laser
2 discs” and inserting “digital versatile discs”.

3 (b) U.S. NOTE.—The additional U.S. Notes to chap-
4 ter 84 of the Harmonized Tariff Schedule of the United
5 States are amended by adding at the end the following
6 new note:

7 “4. Notwithstanding notes 2, 3, and 4 of section XVI, ma-
8 chines and components used for the manufacture of digital
9 versatile discs under subheading 8479.89.85, and parts
10 thereof, whether imported separately or as a whole, in-
11 clude mastering machines which are comprised of one or
12 more of the following machines or components: ashing ma-
13 chines, lapping machines, center hole punching machines,
14 glass polishing machines, glass cleaning machines, in-line
15 system machines, laser encoder machines, electrolytic plat-
16 ing machines, and electrolytic cleaning machines. Ma-
17 chines for the manufacture of digital versatile discs under
18 subheading 8479.89.85 also include replication machines
19 which are comprised of one or more of the following ma-
20 chines or components: bonding machines, aluminum sput-
21 ter machines, gold sputter machines, coater machines,
22 stacker machines, molds, inspection machines, control
23 panels, interface units, and optical laser scanners.”.

24 (c) EFFECTIVE DATE.—The amendments made by
25 subsections (a) and (b) apply with respect to goods en-

1 tered, or withdrawn from warehouse for consumption, on
2 or after the 15th day after the date of the enactment of
3 this Act.

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