
HOLLAND&HART
Made In America?
Country of Origin Requirements
in Federal Government Contracts
A Webinar by Matt Koehl
Thursday, July 18, 2013
9:00 – 10:00 a.m. MT

ATTACHMENT 1

HQ H219519

April 3, 2013

MAR-2 OT:RR:CTF:VS H219519 KSG

Carlos Halasz
Product Compliance Strategy & Policy
Hewlett-Packard Company
8501 SW 152 Street
Palmetto Bay, FL 33157

RE: Government Procurement; Country of Origin of HP LaserJet Enterprise 500 Color M551 Printer and Fax Machine; substantial transformation

Dear Mr. Halasz:

This is in response to your letter dated May 21, 2012, requesting a final determination on behalf of Hewlett-Packard Company ("HP"), pursuant to subpart B of part 177 of the U.S. Customs and Border Protection ("CBP") Regulations (19 CFR Part 177). Under these regulations, which implement Title III of the Trade Agreements Act of 1979 ("TAA") as amended (19 U.S.C. 2511 et seq.), CBP issues country of origin advisory rulings and final determinations as to whether an article is or would be a product of a designated country or instrumentality for the purposes of granting waivers of certain "Buy American" restrictions in U.S. law or practice for products offered for sale to the U.S. Government.

The final determination concerns the country of origin of the HP LaserJet Enterprise 500 Color Printer and Fax Machine M551 ("LaserJet 500"). We note that as a U.S. importer, HP is a party-at-interest within the meaning of 19 CFR 177.22(d)(1) and is entitled to request this final determination. A telephone conference was held on this matter on September 27, 2012.

FACTS:

The LaserJet 500 is a laser-based office machine for printing and faxing, suitable for use in homes and small to medium-size businesses. It is composed of the following components: (1) an incomplete print engine, which consists of a metal frame, plastic skins, motors, controller board (supplier provided firmware), a laser scanning system, fuser, paper trays, cabling, paper transport rollers, miscellaneous sensing and imaging systems; (2) the formatter board, which consists of a printed circuit board, industry standard components and customized integrated circuits; (3) the fax card; (4) the hard disc drive; (5) the solid state drive; (6) the firmware; (7) the intermediate transfer belt ("ITB"); and (8) minor

components and accessories. The incomplete print engine may also come in two other configurations that include either the ITB or the base unit and all of the hardware components.

It is stated that the complete print engine is the central mechanism of the LaserJet 500 that performs printing. It translates a laser image generated by the formatter to markings on paper, transports paper, and fuses the image on the paper. The ITB is essential to the imaging function because it transfers the image from each toner cartridge to the ITB by color plane and then carries the image to the paper. The print formatter is the main controller of the printer. Its main function is to receive input data from remote devices via different input ports, translate that data into format the print engine understands, and send the data onto the print engine, enabling the information to be printed onto paper. It is also responsible for providing command and control signals allowing the engine to start, run and stop motors in a manner that allows the paper to move from input devices to the designated output bin of the printer, while at the same time putting the printed image on the paper.

All the parts are produced in China except for the hard disc drive, which is produced in Malaysia. The firmware that allows access to the hardware (such as trays, and paper size) and software (ex. job counting, security, stored jobs) is developed and written in the U.S. and is tested and debugged in either Brazil or India. The formatter and other sub-systems have their own firmware for operation.

You presented three different scenarios. In scenarios one and two, the LaserJet 500 undergoes the following operations in Mexico: final assembly, downloading firmware written in U.S., and testing, which includes making settings appropriate to the country of the buyer and the client's specific needs. In scenario one, the assembly takes 3-4 minutes whereby the external memory drive is installed onto the formatter and the cables are routed as necessary. The firmware for the engine and formatter is downloaded onto the hard drive or solid state drive. In scenario two, the assembly takes 7-8 minutes and involves the assembly discussed in scenario one, plus the installation of the ITB.
In both scenarios, the testing takes 7-14 minutes and includes making certain settings for the language, paper, functionality, and other feature settings, as described above. In scenario three, the LaserJet 500 undergoes assembly in Mexico that takes 2-3 minutes, the firmware for the sub-systems (engine, formatter) is downloaded onto the hard drive or solid state drive, and the product undergoes testing.

The cost of the incomplete print engine is the most expensive of the hardware components, with the formatter board being the second-most expensive component.

ISSUE:

What is the country of origin of the imported LaserJet 500 for government procurement purposes under the three different scenarios?

LAW AND ANALYSIS:

Pursuant to Subpart B of part 177, 19 CFR 177.21et seq., which implements Title III of the Trade Agreements Act of 1979, as amended (19 U.S.C. 2511 et seq.), CBP issues country of origin advisory rulings and final determinations as to whether an article is or would be a product of a designated country or instrumentality for the purposes of granting waivers of certain "Buy American" restrictions in U.S. law or practice for products offered for sale to the U.S. Government.

Under the rule of origin set forth under 19 U.S.C. 2518(4)(B):

> An article is a product of a country or instrumentality only if (i) it is wholly the growth, product, or manufacture of that country or instrumentality, or (ii) in the case of an article which consists in whole or in part of materials from another country or instrumentality, it has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed.

See also 19 CFR 177.22(a).

It is your position that the country of origin in scenarios one and two is Mexico because the final assembly, programming and testing results in a finished and operational laser printer. You believe that the country of origin in scenario three is Mexico because although the incomplete print engine already includes all hardware components when it is imported into Mexico, the production processing in Mexico consists of loading the firmware onto the print engine.

In determining whether the combining of parts or materials constitutes a substantial transformation, the determinative issue is the extent of operations performed and whether the parts lose their identity and become an integral part of the new article. Belcrest Linens v. United States, 573 F. Supp. 1149 (CIT 1983), aff'd 741 F. 2d 1368 (Fed. Cir. 1984). Assembly operations that are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation. In Customs Service Decision ("C.S.D.") 85-25, 19 Cust. Bull. 844 (1985), CBP held that for purposes of the Generalizes System of Preferences, the assembly of a large number of fabricated components onto a printed circuit board in a process involving a considerable amount of time and

skill resulted in a substantial transformation. In that case, in excess of 50 discrete fabricated components were assembled.

In order to determine whether a substantial transformation occurs when components of various origins are assembled into completed products, CBP considers the totality of the circumstances and makes such determinations on a case-by-case basis. The country of origin of the item's components, extent of the processing that occurs within a country, and whether such processing renders a product with a new name, character, and use are primary considerations in such cases. Additionally, factor such as the resources expended on product design and development, the extent and nature of post-assembly inspection and testing procedures, and worker skill required during the actual manufacturing process will be considered when determining whether a substantial transformation has occurred. No one factor is determinative.

In Data General v. United States, 4 CIT 182 (1982), the court determined that for purposes of determining eligibility under item 807.00, Tariff Schedule of the United States (predecessor to subheading 9802.00.80, Harmonized Tariff Schedule of the United States), the programming of a foreign Programmable Read Only Memory Chip ("PROM") in the United States substantially transformed the PROM into a U.S. article. In programming the imported PROM's, the U.S. engineers systematically caused various distinct electronic interconnections to be formed within each integrated circuit. The programming bestowed upon each circuit its electronic function that is, its "memory" which could be retrieved. A distinct physical change was effected in the PROM by the opening or closing of the fuses, depending on the method of programming. This physical alteration, not visible to the naked eye, could be discerned by electronic testing of the PROM. The court noted that the programs were designed by a U.S. project engineer with many years of experience in "designing and building hardware." While replicating the program pattern from a "master" PROM may be a quick one-step process, the development of the pattern and production of the "master" PROM required much time and expertise. The court noted that it was undisputed that programing altered the character of a PROM. The essence of the article, its interconnections or stored memory, was established by programming. The court concluded that altering the non-function circuitry comprising a PROM through technological expertise in order to produce a functioning read only memory device, possessing a desired distinctive circuit pattern, was no less a substantial transformation than the manual interconnection of transistors, resistors and diodes upon a circuit board created a similar pattern.

You cite HRL H185775, dated December 21, 2011, where CBP ruled that a laser-jet machine that operates as a printer, scanner, copy and fax machine, was considered a product of Mexico for procurement purposes. The scanner in that case was designed, developed and assembled in the U.S. The control panel was also designed in the U.S. The print engine was produced in Vietnam. The formatter, control panel, and solid state drive were produced in China. The hard

disk drive was produced in Malaysia. This case is distinguishable from the instant case because the hardware was produced in various Asian countries.

You also cite HRL H175415, dated October 4, 2011, where CBP held that development of U.S. software, at significant cost to the company and over many years plus the programming of an imported local area network switch in the U.S. together substantially transformed the switch in the U.S. In that case, the software provided the hardware with its essential character of data transmission by providing network switching and routing functionality among other operations. Accordingly, the country of origin of the switch was considered the U.S.

Unlike H185775, in all three scenarios presented in this case, all the components except the hard disc drive are produced in China. The assembly performed in Mexico is a simple assembly not significant enough to result in a substantial transformation of those Chinese components and subassemblies. There is no showing that in any of the scenarios, the processing in Mexico is complex. The downloading of the firmware in Mexico does not change or define the use of the finished printer/fax machine. The firmware itself provides the essential characteristics of performing as a printer and fax machine. While the firmware may be developed in the U.S., the downloading is not occurring in the U.S. Further, the firmware downloaded in Mexico does not include all the firmware necessary for the finished good. Furthermore, some of the assemblies (formatter, for example) have their own firmware. All the significant parts that are the essence of the finished product are produced in China, particularly the high-cost print engine and formatter board. Accordingly, we find that the country of origin of the imported LaserJet 500 for government procurement purposes would be China under all three scenarios.

HOLDING:

Based on the facts provided, the LaserJet 500 will be considered a product of China under all three scenarios for government procurement purposes.

Sincerely,

Sandra L. Bell, Executive Director
Regulations and Rulings
Office of International Trade

ATTACHMENT 2

HQ H193929

June 4 2012

MAR-2 OT:RR:CTF:VS H193929 RSD

CATEGORY: Marking

Munford Page Hall, Esq.
William C. Sjoberg, Esq.
Adduci, Mastriani & Schaumberg LLP
1200 Seventeenth Street, New
Washington, DC 20036

RE: Final Determination regarding the Country of Origin of Digital Projectors, Substantial Transformation

Dear Mr. Hall and Mr. Sjoberg:

This is in response to your three letters dated November 15, 2011, November 22, 2011, and January 18, 2012, requesting final determinations on behalf of a foreign manufacturer of five digital projector models, pursuant to subpart B of part 177 of the U.S. Customs Border Protection (CBP) Regulations (19 C.F.R. Part 177). Under these regulations which implement Title III of the Trade Agreements Act of 1979 (TAA), as amended (19 U.S.C. § 2511 et seq.), CBP issues country of origin advisory rulings and final determinations as to whether an article is or would be a product of a designated country or instrumentality for the purposes of granting waivers of certain "Buy American" restrictions in the U.S. law or practice for products offered for sale to the U.S. Government.

This final determination concerns the country of origin of five different models of digital projectors. We note that the manufacturer of the digital projectors, a foreign manufacturer, is a party-at-interest within the meaning the 19 C.F.R. § 177.22(d)(1), and, as such, is entitled to request this final determination.

FACTS:

Five different models of digital projectors are at issue. One of the digital projectors uses light emitting diodes (LEDs) to project videos and images, while the other digital projectors are lamp based.

First Digital Projector Model

In your submission of November 15, 2011, you describe the subject merchandise as a digital LED portable projector referred to as "Model C". The dimensions of the LED projector are 22 cm x 4.25 cm x 17 cm, (W x H x D), and it weighs 1.1 kg. The digital light processing ("DLP") projector is designed to use LEDs as the light source for projecting images and videos from a computer or other video sources. The LED projector can produce an image size of up to 120 inches measured diagonally. According to your submission, the LED projector was designed and developed in Taiwan. The LED Projector uses four firmware files: (1) the system firmware, (2) the power control microcontroller firmware, (3) the Extended Display Identification Data ("EDID") firmware, and (4) multimedia firmware. These four firmware files are developed and coded in Taiwan and are programmed into the corresponding integrated circuits ("ICs") in Taiwan.

The LED projector contains components from several different countries. Two major functional parts including the digital micro-mirror device (DMD) and the DPP6401 data processor will originate from Taiwan. Other non-Taiwanese components are shipped to China where they are pre-assembled with the Taiwanese components to create modules or sub-assemblies. You list 16 modules that are assembled together to make the LED projectors. The modules are as follows:

1) Bottom casing module containing parts from China, Japan, Korea and Taiwan;

2) Top cover module with mechanical parts from China;

3 4) Two fan modules with mechanical parts from China;

5) Low voltage power supply (LVPS) containing parts from China, Japan, Korea, Malaysia, Philippines, and Taiwan;

6) Semi-finished optical engine module with parts and components from China, Taiwan, Philippines, and Japan;

7) Photo sensor module containing parts from China, Korea, and Taiwan;

8 9 10) Three LED modules with LED chips and circuit boards from the USA;

11) Heat sink for blue LED with mechanical parts from China;

12) Heat pipe module for green LED with mechanical parts from China;

13) Heat pipe module for red LED with mechanical parts from China;

14) Projection lens module with optical lens and mechanical parts from China

15) Main board module with parts and electronic components from China, Hong Kong, Japan, Korea, Malaysia, Philippines, Taiwan, and a processor from Taiwan; and

16) LED driver board module with components and parts from China, Taiwan, Japan, and Malaysia.

After the components are assembled together in China to form the 16 different modules, they are shipped from China to Taiwan for assembly into the LED projectors. Other parts used in the assembly of the projector in Taiwan include screws, brackets which are mounted onto the LVPS sensor board, mylar cable ties, and an EMI gasket.

The assembly, firmware programming, testing and packing processes in Taiwan consist of at least 225 steps taking no less than 4 hours and 54 minutes to complete of which the Taiwanese assembly process consists of at least 71 steps taking approximately 15.6 minutes. The assembly process in producing the projectors in Taiwan includes the following steps:

1) The fan modules are screwed to the bottom casing modules.

2) The LVPS is screwed to the bottom casing module.

3) The semi-finished optical engine module is assembled with other components into the completed optical engine module by screwing, inserting and sticking the pieces together.

4) The completed optical engine module is screwed to the bottom casing module.

5) The main board module is assembled onto the completed optical engine module. The slot of the main board module must be aligned with the DMD board edge connector so as to plug the main board onto the DMD board incorporated into the optical engine module.

6) The wires from the different component and modules are connected to the main board module, by plugging the wires from different components and

modules into the corresponding connectors, respectively, on the main board module.

7) The light source with the main board module is assembled by inserting the edge connector of the LED driver board module to the corresponding slot of the main board module.

8) The light source driver is connected with the LVPS and the wire from the LVPS is plugged into the corresponding connector on the light source driver; or the wire is plugged from the light source driver to the corresponding connector on the LVPS;

9) The top cover is screwed to the bottom casing module.

The light source driver in the Model C projectors is the LED driver module. The light source (LEDs) in the Model C projector is assembled with the semi-finished optical engine module to become the completed optical engine module.

The system firmware programming, power control firmware programming, and EDID programming consists of at least 42 steps taking approximately 11.6 minutes to complete. All functions of the LED projectors undergo testing prior to the LED projector being exported to the United States. The normal testing process includes 12 kinds of functions tests and consists of at least 97 steps taking approximately 137.8 minutes. After the whole projector is assembled, the next step is to program the firmware files into the integrated circuits (ICs) before function testing. The firmware programming process involves power control firmware programming, multimedia firmware programming, and system firmware programming.

Second and Third Digital Projector Models

In your submission of November 22, 2011, you provide a description of two other versions of similar digital projectors. You refer to these versions of the projectors as Model A. The two versions of the digital projector are very similar to each other. The two projectors have the same physical dimensions of 32.4 cm x 9.7 cm x 23.4 cm (W x H x D) and weigh 2.9 kg. The two models are DLP projectors designed to use a high-intensity discharge (“HID”) arc lamp as the light source to project images and videos from computers or other video sources. The digital projectors can produce an image size of up to 362 inches in diagonal. The main difference between the two models of digital projectors are in the resolution of the projected image and the throw ratio, which is defined as the distance (D) measured from lens to screen that a projector is placed from the screen, divided by the width (W) of the image that it will project (D/W).

You state that the two digital projectors are designed and developed in Taiwan. They will also be ultimately assembled in Taiwan. Additionally, major functional parts, including the digital micro-mirror device ("DMD"), and the DDP2431 data processor will originate from Taiwan. The digital projectors will also use five firmware files: (1) the system firmware, (2) the power control firmware (i.e. 8051 microcontroller firmware), (3) the extended display identification data ("EDID") firmware, (4) the network firmware, and (5) the lamp driver firmware which are developed and coded in Taiwan. In addition, the system firmware, power control firmware and EDID firmware are programmed into the corresponding ICs in Taiwan.

The manufacturing of the digital projectors versions of Model A is very similar to the process used to manufacture the digital projector Model C described above. The components will be fabricated in China, Taiwan, USA, Korea, Japan, Indonesia, Malaysia, Thailand, Singapore, and the Czech Republic. In China the components are assembled into 13 different modules or sub-assemblies. The 13 modules are: 1) the bottom casing module, 2) top cover keypad module, 3,4) two fan modules (i.e. the blower module and system fan module), 5) lamp driver (ballast), 6) zoom ring module, 7) lamp module, 8) lamp cover module, 9) semi-finished optical engine module, 9) color wheel module, 10) main board module,11) color wheel module, 12) main board module, and 13) LVPS. The modules/subassemblies are shipped to Taiwan where they are assembled into the digital projectors.

According to your submission, the assembly, firmware programming, testing, and packing operations in Taiwan will consist of at least 220 steps and take no less than 11 hours and 48 minutes to complete. The Taiwanese assembly process itself consists of at least 55 steps, taking approximately 15.5 minutes. The assembly of the second and third digital projectors in Taiwan consists of the same basic processing steps as the first digital projector described previously.

The light source driver in Model A projectors is the ballast (lamp driver). The light source (lamp) in the Model A projectors is installed into the system (projector) after the top cover is assembled with bottom casing module.

The system firmware programming, power control firmware programming and EDID programming consists of at least 35 steps taking approximately 9.3 minutes to complete. All functions of the projectors also undergo extensive testing prior to being exported to the United States. The normal testing process includes 11 kinds of function tests and consists of at least 97 steps which will take approximately 11 hours and 13.6 minutes to perform.

Fourth and Fifth Digital Projector Models

In your submission of January 18, 2012, you provide a description of two other versions a digital projector, designated as Model B. The two versions of the digital projector Model B are substantially similar to Model C described above. The projectors have the same dimensions of 32.4 cm x 9.7 cm x 23.4 cm (W x H x D) and weigh 2.9 kg. The products are DLP projectors designed to use a HID arc lamp as the light source to project images and videos from computers or other video sources. One version of Model B can produce a diagonal image up to 303 inches, while the other version can produce a diagonal image up to 362 inches. Again, the main differences between the two digital projectors are the resolution of the projected image and the throw ratio which is defined as the distance (D) measured from lens to screen that a projector is placed from the screen, divided by the width (W) of the image that it will project (D/W).

There are five firmware files used in digital projectors: (1) the system firmware, (2) the power control firmware (i.e. 8051) microcontroller firmware (3) the EDID firmware, (4) the network firmware, and (5) the lamp driver firmware, which are developed and coded in Taiwan. The system firmware, power control firmware and EDID firmware are programmed into the corresponding ICs in Taiwan.

As in the scenario for the Model B projectors the same 13 modules will be assembled in China from components made in various countries and similarly, they will be shipped to Taiwan for final assembly into the digital projectors. Additionally, major functional parts, including the digital micro-mirror device ("DMD"), and DDP2431 data processor will originate in Taiwan.

The power control firmware and system firmware will be programmed into the ICs. The complete digital projector will be subject to five function tests in what is designated as the "pre-test". In addition, the digital projectors will be subject to a series of other tests. After finishing the six function tests in the "post test", the EDID firmware is programmed into the digital projectors to provide the identification of the digital projectors. When the digital projectors pass the "post tests", they will be sent to the packing department, where they will be packed together with the accessory kits.

The assembly, firmware programming, testing, and packing processes in Taiwan described consist of at least 211 steps taking no less than 2 hours and 59.6 minutes to complete, of which the assembly process consists of at least 68 steps taking approximately 10.6 minutes to complete. The assembly of the fourth and fifth digital projectors in Taiwan consists of the same basic processing steps as the other three digital projector described previously.

The light source driver in Model B projectors is the ballast (lamp driver). The light source (lamp) in the Models B projectors is installed into the system (projector) after the top cover is assembled with the bottom casing module.

The system firmware programming, power control firmware programming and EDID programming consist of at least 35 steps taking approximately 9.3 minutes to perform. All functions of the digital projectors undergo testing prior to exportation to the United States. The normal testing process includes 11 function tests and consists of at least 86 steps taking approximately 2 hours and 30.7 minutes.

ISSUE:

What is the country of origin of the digital projectors for purposes of U.S. government procurement?

LAW AND ANALYSIS:

Pursuant to Subpart B of Part 177, 19 CFR § 177.21 et seq., which implements Title III of the Trade Agreements Act of 1979, as amended (19 U.S.C. § 2511 et seq.), CBP issues country of origin advisory rulings and final determinations as to whether an article is or would be a product of a designated country or instrumentality for the purposes of granting waivers of certain "Buy American" restrictions in U.S. law or practice for products offered for sale to the U.S. Government.

Under the rule of origin set forth under 19 U.S.C. § 2518(4)(B):

> An article is a product of a country or instrumentality only if (i) it is wholly the growth, product, or manufacture of that country or instrumentality, or (ii) in the case of an article which consists in whole or in part of materials from another country or instrumentality, it has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed.

See also 19 C.F.R. § 177.22(a).

In determining whether the combining of parts or materials constitutes a substantial transformation, the determinative issue is the extent of operations performed and whether the parts lose their identity and become an integral part of the new article. Belcrest Linens v. United States, 573 F. Supp. 1149 (Ct. Int'l Trade 1983), aff'd, 741 F.2d 1368 (Fed. Cir. 1984). Assembly operations that are minimal or simple, as opposed to complex or meaningful, will generally not result in a substantial transformation.

In order to determine whether a substantial transformation occurs when components of various origins are assembled into completed products, CBP considers the totality of the circumstances and makes such determinations on a case-by-case basis. The country of origin of the item's components, extent of the processing that occurs within a country, and whether such processing renders a product with a new name, character, and use are primary considerations in such cases. Additionally, factors such as the resources expended on product design and development, the extent and nature of post-assembly inspection and testing procedures, and worker skill required during the actual manufacturing process will be considered when determining whether a substantial transformation has occurred. No one factor is determinative.

In Data General v. United States, 4 Ct. Int'l Trade 182 (1982), the court determined that for purposes of determining eligibility under item 807.00, Tariff Schedules of the United States (predecessor to subheading 9802.00.80, Harmonized Tariff Schedule of the United States), the programming of a foreign PROM (Programmable Read-Only Memory chip) in the United States substantially transformed the PROM into a U.S. article. In programming the imported PROMs, the U.S. engineers systematically caused various distinct electronic interconnections to be formed within each integrated circuit. The programming bestowed upon each circuit its electronic function, that is, its "memory" which could be retrieved. A distinct physical change was effected in the PROM by the opening or closing of the fuses, depending on the method of programming. This physical alteration, not visible to the naked eye, could be discerned by electronic testing of the PROM. The court noted that the programs were designed by a U.S. project engineer with many years of experience in "designing and building hardware." While replicating the program pattern from a "master" PROM may be a quick one-step process, the development of the pattern and the production of the "master" PROM required much time and expertise. The court noted that it was undisputed that programming altered the character of a PROM. The essence of the article, its interconnections or stored memory, was established by programming. The court concluded that altering the non-functioning circuitry comprising a PROM through technological expertise in order to produce a functioning read only memory device, possessing a desired distinctive circuit pattern, was no less a "substantial transformation" than the manual interconnection of transistors, resistors and diodes upon a circuit board creating a similar pattern.

In Texas Instruments v. United States, 681 F.2d 778, 782 (CCPA 1982), the court observed that the substantial transformation issue is a "mixed question of technology and customs law." In Headquarters Ruling (HQ) 555578 dated June 11, 1990, overhead projectors were produced in Haiti from components of Belgian and U.S. origin, as well as from parts fabricated in Haiti. CBP concluded that the operations performed in Haiti constituted more than simple combining operations and resulted in a new and different article of commerce with a new name, character and use.

In HQ H114395, dated May 18, 2011, CBP considered the country of origin of a DLP projector that used LEDs as its light source for projecting photos and videos from mobile devices onto any surface. We were asked to consider two scenarios. In the first scenario, PCBA-ICs from Japan, Thailand, the U.S., Korea, and Malaysia; and fly eyes from Japan were shipped to China. Some Taiwanese origin components (DMDs, DPP 1505 chips, EPROM's, LEDs, and lenses) were also be shipped to China for assembly with Chinese-origin components (PCBs, projecting lenses, mirrors, and mechanical parts), the ICs, and fly eyes for making modules for the light engine and the PCBA main board. In China, two types of Taiwanese firmware for operating the projector were downloaded to memory chips located on the light engine and PCBA main board modules. The modules assembled in China were then shipped to Taiwan for quality inspections. In the second scenario, PCBA-ICs from Japan, Thailand, the U.S., Korea, and Malaysia; and fly eyes from Japan were shipped to Taiwan. The assembly and programming operations that took place in China, under the first scenario, were all performed in Taiwan. We determined that the light engine module and the PCBA main board were the essence of the projector, and it was at their production where the last substantial transformation occurred. Therefore, when the light engine module and PCBA main board module were assembled and programmed in China, the country of origin of the projectors was China for the purposes of U.S. government procurement. However, we also ruled that if the light engine module and PCBAs main board modules were assembled and programmed in Taiwan, then the country of origin of the projectors was Taiwan for purposes of U.S. government procurement

HQ H146735, (July 29, 2011), concerned a determination of the country of origin of two models of a digital projector, which were very similar to the products under consideration here. In that case, Chinese modules were assembled together into a projector in Taiwan. However, the projectors were designed and developed in Taiwan. Many of the main parts of the projectors, including the data processors were also fabricated in Taiwan. CBP determined that for purposes of government procurement the country of origin of the digital projectors assembled in Taiwan using the Chinese modules was Taiwan. In making this determination, CBP considered that the bottom cover module, elevator module, right cover module, I/O cover module, cosmetic module, two fan modules, lamp driver module programmed in China with Chinese firmware, zoom ring module, lamp module, lamp cover module, LAN module programmed in China with Taiwanese origin firmware, and the LVPS module from China were assembled together in Taiwan with other Chinese components to form a completed projector. After assembly was performed, the projector was programmed in Taiwan with three types of Taiwanese developed firmware (power control firmware, system firmware, and EDID). We found that the assembly and programming operations performed in Taiwan were sufficiently complex and meaningful so as to create a new article with a distinct name, character, and use. In support of this determination, we further noted that some

of Chinese modules were made using Taiwanese parts. Thus, through the operations undertaken in Taiwan, we concluded that the individual parts from various countries lost their separate identities to become a new and different article, *i.e*., the projector.

In our judgment, the five versions of the different models of digital projectors involved in this case closely resemble the digital projectors that we considered in HQ H147365. In addition, in this case the processing steps and programming operations performed in Taiwan are very similar to the actions undertaken in Taiwan in HQ H147365. Moreover, as in HQ H147365, we recognize that the most essential components of the LED projectors, the DMD and data processors, will be made in Taiwan. Furthermore, the important firmware files, namely, the system firmware, power control firmware, lamp driver firmware, and EDID firmware are developed and coded in Taiwan. The programming of the ICs, to make the digital projectors functional through the interaction of modules and via the firmware files after the digital projectors have been assembled, is also done in Taiwan. We also note that as in HQ H147365, a number of the Chinese modules contain some significant Taiwanese parts. Thus, as in HQ H147365, we find that the assembly processed previously described and the programming operations performed in Taiwan are sufficiently complex and meaningful so as to create new articles with a distinct name, character, and use.

We note that there are some distinctions among the five different versions of the digital projectors under consideration. The projector Model A and projector Model B are the same type of digital projector with different resolutions and some different features. These four versions of the projectors are similar because they are lamp based projectors. Model C is a slightly different type of projector in that it is an LED based projector and does not require a color wheel module. However, we do not believe that these differences in the projectors are relevant in determining their country of origin. Consequently, in accordance with our holding in HQ H147365, we find that the country of origin of the specified five models of the finished digital projectors is Taiwan.

HOLDING:

Based on the facts presented in this case, we find that the assembly and programming operations performed in Taiwan substantially transform the non-Taiwanese components into Taiwanese digital projectors. Therefore, the country of origin of the five different versions of digital projectors described above for purposes of government procurement is Taiwan.

Notice of this final determination will be given in the Federal Register, as required by 19 C.F.R. § 177.29. Any party-at-interest other than the party which requested this final determination may request, pursuant to 19 C.F.R. § 177.31, that CBP reexamine the matter anew and issue a new final determination.

Pursuant to 19 C.F.R. § 177.30, any party-at-interest may, within 30 days of publication in the Federal Register Notice referenced above, seek judicial review of this final determination before the Court of International Trade.

Sincerely,

Sandra L. Bell, Executive Director
Regulations and Rulings
Office of International Trade

ATTACHMENT 3

FAR 52.225-6 Trade Agreements Certificate.

As prescribed in 25.1101(c)(2), insert the following provision:

TRADE AGREEMENTS CERTIFICATE (JAN 2005)

(a) The offeror certifies that each end product, except those listed in paragraph (b) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(b) The offeror shall list as other end products those supplies that are not U.S.-made or designated country end products.

Other End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(c) The Government will evaluate offers in accordance with the policies and procedures of Part 25 of the Federal Acquisition Regulation. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for those products are insufficient to fulfill the requirements of this solicitation.

(End of provision)

ATTACHMENT 4

FAR 52.225-2 Buy American Act Certificate.

As prescribed in 25.1101(a)(2), insert the following provision:

BUY AMERICAN ACT CERTIFICATE (FEB 2009)

(a) The offeror certifies that each end product, except those listed in paragraph (b) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products, *i.e.*, an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product." The terms "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act—Supplies."

(b) Foreign End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(c) The Government will evaluate offers in accordance with the policies and procedures of Part 25 of the Federal Acquisition Regulation.

(End of provision