



This document is scheduled to be published in the Federal Register on 05/31/2016 and available online at <http://federalregister.gov/a/2016-12798>, and on [FDsys.gov](http://FDsys.gov)

## DEPARTMENT OF HOMELAND SECURITY

### U.S. Customs and Border Protection

#### Notice of Issuance of Final Determination Concerning

#### Certain Network Cables and Transceivers

**AGENCY:** U.S. Customs and Border Protection, Department of Homeland Security.

**ACTION:** Notice of final determination.

**SUMMARY:** This document provides notice that U.S. Customs and Border Protection (“CBP”) has issued a final determination concerning the country of origin of certain network cables and transceivers. Based upon the facts presented, CBP has concluded that the country of origin of the network cables and transceivers is China for purposes of U.S. Government procurement.

**DATES:** The final determination was issued on May 19, 2016. A copy of the final determination is attached. Any party-at-interest, as defined in 19 CFR 177.22(d), may seek judicial review of this final determination within [INSERT DATE 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**FOR FURTHER INFORMATION CONTACT:** Grace A. Kim, Valuation and Special Programs Branch, Regulations and Rulings, Office of International Trade (202) 325-7941.

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that on May 19, 2016, pursuant to subpart B of Part 177, U.S. Customs and Border Protection Regulations (19 CFR part 177, subpart B), CBP issued a final determination concerning the country of origin of certain network cables and transceivers, which may be offered to the U.S. Government under an undesignated government procurement contract. This final determination, HQ H273091, was issued under procedures set forth at 19 CFR part 177, subpart B, which implements Title III of the Trade Agreements Act of 1979, as amended (19 U.S.C. 2511-18). In the final determination,

CBP concluded that the processing in the U.S. does not result in a substantial transformation. Therefore, the country of origin of the certain network cables and transceivers is China for purposes of U.S. Government procurement.

Section 177.29, CBP Regulations (19 CFR 177.29), provides that a notice of final determination shall be published in the **Federal Register** within 60 days of the date the final determination is issued. Section 177.30, CBP Regulations (19 CFR 177.30), provides that any party-at-interest, as defined in 19 CFR 177.22(d), may seek judicial review of a final determination within 30 days of publication of such determination in the **Federal Register**.

Dated: May 19, 2016

Myles B. Harmon  
Acting Executive Director  
Regulations and Rulings  
Office of International Trade

HQ H258960

OT:RR:CTF:VS H258960 GaK

CATEGORY: Origin

Mr. Stuart P. Seidel  
Baker & McKenzie, LLP  
815 Connecticut Ave. NW  
Washington, DC 20006-4078

RE: U.S. Government Procurement; Country of Origin Marking; Network Transceivers and High Speed Cabling Devices; Substantial Transformation

Dear Mr. Seidel:

This is in response to your letter dated October 24, 2014, requesting a final determination on behalf of AddOn Computer Peripherals LLC (“AddOn”) 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 U.S. law or for products offered for sale to the U.S. Government. This final determination concerns the country of origin of AddOn’s network transceivers and high speed cabling devices. As a U.S. importer, AddOn is a party-at-interest within the meaning of 19 C.F.R. § 177.22(d)(1) and is entitled to request this final determination. You also request a country of origin marking determination.

In your letter, you requested confidential treatment for certain information contained in the file. Pursuant to 19 C.F.R. § 177.2(b)(7), the identified information has been bracketed and will be redacted in the public version of this final determination.

#### FACTS:

The products at issue are network transceivers and high speed cabling devices. You state that network transceivers are used for transmitting and receiving information between two network devices. The medium of transmission is usually copper or fiber optic cables and you claim that AddOn’s network transceivers can work with one or the other. There are different models of transceivers based on the technology employed for a particular network device, transmission medium, speed and/or distance. Depending on the original equipment manufacturer (“OEM”), technology, and applications, the sales price for the transceivers range from [\*\*\*\*\*] to [\*\*\*\*\*]. You claim that the difference in cost and the sales price is attributable to the software program and subsequent testing and quality assurance process. The transceiver also “hot plugs,” which means that it can be plugged into a network device while the transceiver is working, and connect that device to a network.

You state that most transceivers are built to a Multi-Source Agreement (“MSA”) standard to provide common formats and functions to ensure that transceivers can operate with systems and each other. The MSA standard is said to incorporate a programmable memory, called an EEPROM. The EEPROM can also be used to tell the transceiver to enable functionality that goes beyond the MSA standard, which can be unique to the network device manufacturer. You claim that sometimes the EEPROM is programmed to allow the transceiver to perform a proprietary handshake and be identified as capable of certain advanced features. You further claim that if the transceiver fails the proprietary handshake, it may be rendered inoperable. You state that AddOn’s transceivers conform to the MSA standard and to the OEM’s higher level of compatibility.

You provided two scenarios in transceiver production. In both scenarios, the hardware components are manufactured in China or other Asian country. In Scenario 1, AddOn purchases the “blank” transceivers from an unrelated supplier in China or other Asian country. You state that “blank” transceivers are just hardware without any programming. AddOn downloads its proprietary software, which was developed in the U.S. and you claim that this makes the transceivers functional. This scenario applies to over 95% of the imported transceivers. In Scenario 2, AddOn purchases transceivers that have already been programmed with a generic program, which is removed and AddOn’s proprietary software is installed to provide

interoperability between different OEMs' systems. AddOn's transceivers are then tested for compatibility in its Certification Test Lab. In both scenarios, the programming and testing are conducted in the U.S.

The second product is a high speed cabling device, which comprises two transceivers and a transmission medium (copper or fiber optic cable) in one integrated part. All programming and testing are said to be the same as the transceivers, except that AddOn programs and tests two transceivers instead of one for each product.

AddOn's proprietary operational firmware/software was developed and programmed in the U.S. You state that the amount of time invested in development was approximately [\*\*\*\*\*] hours and the software developers have a Bachelors of Science or better or equivalent work experience. You also state that the dollar value increases significantly after programming, which ranges from [\*\*\*\*\*] depending on the part type, application and customer.

#### ISSUE:

What is the country of origin of the network transceivers and high speed cabling devices for purposes of U.S. government procurement and marking?

#### LAW AND ANALYSIS:

##### Government Procurement

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 rendering advisory rulings and final determinations for purposes of U.S. government procurement, CBP applies the provisions of subpart B of part 177 consistent with the Federal Acquisition Regulations. *See* 19 C.F.R. § 177.21. In this regard, CBP recognizes that the Federal Acquisition Regulations restrict the U.S. Government's purchase of products to U.S.-made or

designated country end products for acquisitions subject to the TAA. *See* 48 C.F.R. § 25.403(c)(1). The Federal Acquisition Regulations define “U.S.-made end product” as:

...an article that is mined, produced, or manufactured in the United States or that is substantially transformed in the United States 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 transformed.

48 C.F.R. § 25.003.

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.” In addition, the court noted that 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 C.S.D. 84-85, 18 Cust. B. & Dec. 1044, CBP stated:

We are of the opinion that the rationale of the court in the Data General case may be applied in the present case to support the principle that the essence of an integrated circuit memory storage device is established by programming; . . . [W]e are of the opinion that the programming (or reprogramming) of an EPROM results in a new and different article of commerce which would be considered to be a product of the country where the programming or reprogramming takes place.

Accordingly, the programming of a device that confers its identity as well as defines its use generally constitutes substantial transformation. *See also* Headquarters Ruling Letter (“HQ”) 558868, dated February 23, 1995 (programming of SecureID Card substantially transformed the card because it gave the card its character and use as part of a security system and the programming was a permanent change that could not be undone); HQ 735027, dated September 7, 1993 (programming blank media (EEPROM) with instructions that allowed it to perform certain functions that prevented piracy of software constituted substantial transformation); and, HQ 733085, dated July 13, 1990; *but see* HQ 732870, dated March 19, 1990 (formatting a blank diskette did not constitute substantial transformation because it did not add value, did not involve complex or highly technical operations and did not create a new or different product); and, HQ 734518, dated June 28, 1993, (motherboards were not substantially transformed by the implanting of the central processing unit on the board because, whereas in *Data General* use was being assigned to the PROM, the use of the motherboard had already been determined when the importer imported it).

In this case, the hardware components of the transceivers in both scenarios are wholly manufactured in a foreign country and imported into the U.S. In Scenario 1, the transceivers are “blanks”, and in Scenario 2, the transceivers are preprogrammed with a generic program. In both scenarios, AddOn will download its proprietary software onto the transceivers which will transform them into a proprietary network device capable of performing its intended functions. You argue that in both scenarios, the imported hardware is substantially transformed by the development, configuration, and download operations of the U.S. origin software. In Scenario 1, you argue that the completely non-functional hardware is transformed into a transceiver and in Scenario 2, you argue that the hardware with generic software is substantially transformed into a fully functional network device that is capable of performing their intended functions. You also state that the expenses for the work performed in the U.S. far outweigh the work performed abroad. In support of your argument, you cite to HQ 562964, dated March 29, 2004; HQ H034843, dated May 5, 2009; and HQ H175415, dated October 4, 2011.

In HQ 562964, CBP considered certain network tape drive units and its components, including “bare bones” (basic) tape drives, imported into Country X where the components were assembled into a Small Computer System Interface (“SCSI”) tape drive rack unit. The assembly process involved approximately eight major components, simple operations, and required approximately twenty minutes. In Scenario 1, the “bare bones” tape drives were preprogrammed with the OEM’s firmware prior to importation, which allowed the tape drives to be recognized and controlled by the OEM’s network. CBP found that the assembly operations did not alter the function of the tape drive, and that its character and use as a network storage device was defined prior to importation into Country X, and therefore the tape drive rack unit was not substantially transformed. In Scenario 2, the “bare bones” tape drives were imported with a universal firmware that was installed only for testing and diagnostic purposes and the OEM proprietary firmware was burned onto the tape drives in Country X. CBP found that the OEM firmware allowed the tape drives to be recognized and controlled by the OEM’s network and defined the character and use of the tape drive as a network storage device and concluded that the tape drive rack unit had been substantially transformed.

In HQ H034843, CBP held that USB flash drives were products of Israel because, though the assembly process began in China and the software and firmware were developed in Israel, the installation and customization of the firmware and software that took place in Israel made the USB flash drives functional, permitted them to execute their security features, and increased their value. In HQ H175415, CBP held that Ethernet switches were products of the U.S. because, though the hardware components were fully assembled into Ethernet switches in China, they were programmed with U.S.-origin operating software enabling them to interact and route within the network, and to monitor, secure, and access control of the network.

However, in HQ H241177, dated December 3, 2013, Ethernet switches were assembled to completion in Malaysia and then shipped to Singapore, where U.S.-origin software was downloaded onto the switches. CBP further found that software downloading did not amount to programming, which involved writing, testing and implementing code necessary to make the computer function a certain way. *See also* HQ H240199, dated March 10, 2015 (the notebook computer was not substantially transformed when the computer was assembled in Country A, imported into Country F, and Country D-origin BIOS was downloaded). CBP concluded in HQ H241177, that the software downloading performed in Singapore did not amount to programming and that the country of origin was Malaysia, where the last substantial transformation occurred.

In Scenario 1, the imported transceivers are completely non-functional and AddOn's proprietary software is downloaded in the U.S., making the transceivers functional and compatible with the OEM technology. The proprietary software was developed in the U.S. at significant cost to AddOn over many years. Without the proprietary software, the transceivers could not function as a network device in any capacity. In accordance with HQ H175415, we find that the non-functional transceivers are substantially transformed as a result of downloading performed in the U.S., with proprietary software developed in the U.S. Therefore, the country of origin of the transceivers in Scenario 1 is the U.S.

In Scenario 2, the imported transceivers are preprogrammed with a generic program prior to importation, which is replaced with the proprietary software in the U.S. While the transceivers have generic network functionality, it is stated that they will not be recognized by or work on proprietary networks. As HQ 732870 and HQ 734518 point out, when programming does not actually create a new or different product, it may not constitute a substantial transformation. Given these considerations, it would appear that programming an imported, already functional, transceiver just to customize its network compatibility, would not actually change the identity of the imported transceiver. *See* HQ H241177 *supra*. Also, in HQ 562964, CBP found that the "bare bones" tape drives were substantially transformed when the universal firmware was replaced with the proprietary firmware because the universal firmware was only for testing and diagnostic purposes. In this case, while the preprogrammed transceivers cannot function as intended by AddOn's market and its customers, the transceivers are capable of generic network functionality at the time of importation. Downloading the AddOn proprietary software does not actually change the identity of the imported transceiver and its name, character, and use remain the same. Therefore, in Scenario 2, we find that the imported transceivers with a generic program will not be substantially transformed in the U.S. Therefore, we find that the country where the last substantial transformation occurs is China or other Asian country where the hardware

components are manufactured. The country of origin of the transceivers in Scenario 2 is China or other Asian country.

### Marking

Section 304 of the Tariff Act of 1930, as amended (19 U.S.C. § 1304), provides that, unless excepted, every article of foreign origin imported into the U.S. shall be marked in a conspicuous place as legibly, indelibly, and permanently as the nature of the article (or container) will permit, in such manner as to indicate to the ultimate purchaser in the U.S. the English name of the country of origin of the article.

Part 134, CBP Regulations (19 CFR Part 134), implements the country of origin marking requirements and exceptions of 19 U.S.C. § 1304. Section 134.1(b), CBP Regulations (19 CFR § 134.1(b)), defines the country of origin of an article as the country of manufacture, production, or growth of any article of foreign origin entering the U.S. Further work or material added to an article in another country must effect a substantial transformation in order to render such other country the country of origin for country of origin marking purposes.

Thus, the issue in determining the country of origin of the transceivers is whether the transceivers of Chinese (or other Asian country) origin are substantially transformed as a result of the operations performed in the U.S. As indicated above, in Scenario 1, we have found that the Chinese (or other Asian country) origin transceivers are substantially transformed in the U.S., but not in Scenario 2. Therefore, pursuant to 19 U.S.C. § 1304, the country of origin for marking purposes of the transceivers is the U.S. in Scenario 1, and China or other Asian country in Scenario 2.

### HOLDING:

Based on the facts of this case, the country of origin of transceivers and high speed cabling devices is the U.S. in Scenario 1, and China or other Asian country in Scenario 2 for purposes of U.S. Government procurement and country of origin marking.

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 of the Federal Register Notice referenced above, seek judicial review of this final determination before the Court of International Trade.

Sincerely,

Myles B. Harmon  
Acting Executive Director  
Regulations and Rulings

Office of International Trade

[FR Doc. 2016-12798 Filed: 5/27/2016 8:45 am; Publication Date: 5/31/2016]