



DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Notice of Issuance of Final Determination Concerning Gyrocompasses

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 gyrocompasses.

Based upon the facts presented, CBP has concluded that the country of origin of the gyrocompasses is the United States for purposes of U.S. Government procurement.

DATE: This final determination was issued on April 24, 2018. 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 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Ross M. Cunningham, Valuation and Special Programs Branch, Regulations and Rulings, Office of Trade, (202) 325-0034.

SUPPLEMENTARY INFORMATION: Notice is hereby given that on April 24, 2018, pursuant to subpart B of Part 177, U.S. Customs and Border Protection Regulations (19 CFR Part 177, subpart B), CBP issued one final determination concerning the country of origin of certain gyrocompasses, which may be offered to the U.S. Government under an undesignated government procurement contract. This final determination (HQ H287851) 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 United States will result in a substantial transformation.

Therefore, the country of origin for purposes of U.S. Government procurement of the gyrocompasses is the United States.

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: April 24, 2018

Alice A. Kipel
Executive Director
Regulations and Rulings
Office of Trade

HQ H287851

April 24, 2018

OT:RR:CTF:VS H287851 RMC

CATEGORY: Country of Origin

Michael S. Snarr
Baker & Hostetler LLP
Washington Square, Suite 110
1050 Connecticut Ave., NW
Washington, DC 20036-5304

Re: U.S. Government Procurement; Country of Origin of Gyrocompass; Substantial Transformation

Dear Mr. Snarr:

This is in response to your letter dated June 12, 2017, requesting a final determination on behalf of [] (“ the Manufacturer”) pursuant to subpart B of Part 177 of the U.S. Customs and Border Protection (“CBP”) Regulations (19 C.F.R. Part 177). A meeting was held in our office on December 18, 2018, during which you and your client explained how the product functions and the assembly process. A follow-up submission dated January 4, 2018, was also provided.

This final determination concerns the country of origin of a gyrocompass that will be assembled in the United States. As a U.S. importer, [the Manufacturer] 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 have asked that certain information submitted in connection with this request be treated as confidential. Inasmuch as this request conforms to the requirements of 19 C.F.R. § 177.2(b)(7), the request for confidentiality is approved. The information contained within brackets in this ruling or in the attachments to this ruling request, forwarded to our office, will not be released to the public and will be withheld from published versions of this ruling.

FACTS:

[The Manufacturer] is incorporated in [] and has its principal place of business in []. It is a wholly-owned subsidiary of [] (“the Parent Company”) a [] entity. [The Parent Company] develops gyrocompasses and advanced inertial navigational systems for navigation on land, at sea, in the air, and in space.

The subject merchandise is a “surface gyrocompass and attitude reference system” sold under the name []. The technical offer documentation provided describes the merchandise as a “small size, low weight, low power consumption, IMO-certified, solid-state Fiber-Optic gyrocompass providing all necessary data for demanding navigation and control applications: True-North heading, roll, pitch and rates of return.” The merchandise transmits these data to onboard navigational and control systems to control a ship’s movement at sea.

Five main components comprise the merchandise:

1. Inertial Sensor Assembly (“ISA”) – Manufactured in France from French (or possibly U.S.) parts, the ISA contains interferometric fiber-optic gyroscopes (“FOGs”) and accelerometers. The FOGs incorporate fiber-optic coils connected to integrated optical circuits to create the interferometers that provide the actual place of gyroscopic measurement. Three FOGs are combined into a single component structure along with three accelerometers to form the ISA. The capability of the ISA is limited to measuring raw accelerations and rotation rates. After testing in France, the ISA will be shipped to the United States.
2. Digital Signal Processing (“DSP”) Board – Manufactured in the United States from U.S. parts, the DSP Board acquires the measurements from the ISA, compensates for various kinds of potential measurement errors, computes an angular position using algorithms, and sends the computed parameters to a dual-access memory unit. It is comprised of 46

different components including capacitors, resistors, connectors, inductors, an oscillator, a flash memory unit, and others.

3. Interface Board – Manufactured in the United States from U.S. parts (other than the connectors on the interface board, which are sourced in Germany “as per the standard for connectors of this purpose”), the Interface Board contains the connections for the components necessary for communication between the product and the ship’s other hardware (e.g., panel mounted receptacle connectors, serial link drivers, and Ethernet LAN transformer). Thus, the Interface Board allows the gyroscope to communicate with the ship’s other navigational equipment, and vice versa. It is comprised of 56 different components including connectors, capacitors, inductors, diodes, digital isolators, a filter, and Ethernet transformer, and others.
4. Processor Board – Manufactured in the United States from U.S. parts, the Processor Board contains a microcontroller that serves as the intelligence of the merchandise. It also contains micro and flash memory that are necessary for the functioning of the merchandise. It is comprised of 61 different components including resistors, oscillators, connectors, diodes, LEDs, a DC power converter, a flash memory unit, and others.
5. Customized Housing – Machined in the United States from U.S. parts, the customized housing consists of a metal baseplate and top cover that enclose and protect the other components.

The U.S. assembly processes described in [the Manufacturer’s] submission begin when a subcontractor assembles the DSP board, Interface Board, Processor Board, and housing in the United States. You state that the combined manufacturing time for the boards is 4.2 hours, while the customized metal housing takes about ten hours. For the boards, the assembly process generally involves the placement and soldering into place of the electronic components necessary for the boards’ functioning. The housing is made by bending sheets of metal, brazing them together, and powder coating the component.

Once the boards and housing have been completed, they are ready to be integrated with the French-origin ISAs to produce the final product. Although the ISAs generate raw data such as angular rates and linear acceleration, these measurements “lack the accuracy and proper frame of reference needed to compute the relevant parameters for navigation or to transmit these data into a functional format for the ship’s navigation and control” (i.e., heading, roll, pitch, and heave). You state that the DSP board, interface board, and processor board are essential in processing and converting the “raw” signal that the ISA generates into a signal that can be used by the ship’s navigational and control systems. For example, according to the information provided, the processor board serves as the “intelligence” of the product and contains firmware and the user interface that allows a ship’s crew to control the product. The interface board serves as the electrical link between the ship’s electrical equipment and the product, and the DSP board processes the raw data generated by the ISA into a format that is compatible with navigational equipment. Thus, you state that the U.S. processor board, interface board, and DSP board are essential to the capabilities and functioning of the product.

The final assembly of the [] product in the United States will take approximately seven and a half hours and will begin when the ISA is mounted to the baseplate of the housing, which involves placing a gasket, affixing heat-sink compound, and fastening screws. Technicians will then combine the interface board, processor board, and DSP Board to form “electronic clusters.” This process will involve soldering connectors, attaching flexible cables, and screwing components together. The processor board and the DSP board will then each be loaded with software developed in France.

After this process is complete, the electronic clusters will be connected to the ISA through the mounting of cables that permit electronic exchange between the ISA and the electronic cluster. You state that this integration in the United States will produce an Inertial Measurement Unit (“IMU”) that has the capacity of recording and collecting raw navigational data, as well as generating and transmitting those data in a format that related nautical systems can use.

In order to make the IMUs ready for installation, however, calibration testing must be conducted. In this stage of the production process, a motion tester and software tester will be used to ensure smooth integration with a ship’s navigation systems. [The Manufacturer] states that the calibration testing will take up to 24 hours. Once this testing is completed, the finished gyrocompass will be ready for use in the field.

ISSUE:

What is the country of origin of the gyrocompasses for purposes of U.S. Government procurement?

LAW AND ANALYSIS:

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, pursuant to subpart B of Part 177, 19 C.F.R. § 177.21 *et seq.*, which implements Title III of the Trade Agreements Act of 1979, as amended (19 U.S.C. § 2511 *et seq.*).

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 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 order to determine whether a substantial transformation occurs when components of various origins are assembled into completed products, the extent of operations performed and whether the parts lose their identity and become an integral part of the new article are considered. *See Belcrest Linens v. United States*, 6 CIT 204 (1983), *aff'd*, 741 F.2d 1368 (Fed. Cir. 1984). 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.

In HQ 558919, dated March 20, 1995, U.S. Customs (now U.S. Customs and Border Protection) held that an extruder assembly manufactured in England was substantially transformed in the United States when it was combined with U.S. components (a drive unit, an electric control panel, and an extruder screw) to create a vertical extruder. Assembly operations in the United States included "the complete wiring of the motor and control panel to the subassembly, followed by a complete set up and testing program to insure that the vertical extruder is operating within its design parameters." In reaching the decision that a substantial transformation had occurred, Customs emphasized the importance of the U.S. components to the functioning of the final product. Based on the extent of the assembly operations and the importance of the U.S. components, Customs held that the country of origin of the vertical extruder was the United States.

By contrast, assembly operations that are minimal or simple will generally not result in a substantial transformation. For example, in HQ 734050, dated June 17, 1991, CBP held that Japanese-origin printer components were not substantially transformed in China when assembled to form finished printers. Three components, the circuit, power source, and outer case units, were entirely assembled or molded in Japan. Two components, the head and mechanical units, were made in Japan, but exported to China in an unassembled state. In China, the head and mechanical units were assembled with screws and screwdrivers. Thereafter, the head, mechanism, circuit, and power source units were mounted onto the outer case with screws and screwdrivers. In holding that the country of origin of the assembled printers was Japan, CBP recognized that the vast majority of the printer's parts were of Japanese origin and that the operations performed in China were relatively simple assembly operations.

Here, as in HQ 558919, the merchandise contains many U.S. materials that are important components of the final product. With the exception of the French-origin ISA, which may in some cases contain U.S. parts, and some German-origin connectors on one subassembly, all the materials used in the gyroscope are of U.S.-origin. These U.S.-origin parts are essential to the functionality of the finished gyrocompass. As noted above, the processor board serves as the “intelligence” of the product and contains firmware and the user interface that allows a ship’s crew to control the product. The interface board serves as the electrical link between the ship’s electrical equipment and the product, and the DSP board processes the raw data generated by the ISA into a format that is compatible with navigational equipment. Without the U.S.-origin components, the ISA’s functionality would be limited to measuring raw accelerations and rotation rates and would not be capable of producing the output expected from a navigational gyrocompass including heading, roll, pitch, and heave.

In addition, the assembly processes that will occur in the United States are complex and time-consuming. Each of the electronic boards contains dozens of electrical components that must be properly mounted to the surface of the board and soldered into place. This process takes 4.2 hours, while the customized metal housing takes about ten hours to manufacture. Next, these components will be combined with the ISA in a process that includes placing a gasket, affixing a heat-sink compound, soldering connectors, attaching cables, fastening screws, and loading software. This process will take an additional seven and a half hours. Finally, significant post-assembly testing procedures, which will calibrate the merchandise and ensure smooth communication with the ship’s navigational equipment, will be carried out in the United States. [The Manufacturer] states that the calibration testing will take up to 24 hours. Consistent with previous CBP decisions, the large number of individual components, the 4.2 hours that will be spent assembling the boards, the ten hours that will be spent manufacturing the metal housing, the seven and a half hours that will be spent on final assembly, and the time spent on final calibration testing (up to 24 hours) are evidence of complex and meaningful assembly operations in the United States.

In addition, we find that the French-origin ISAs will undergo a change in name, character, and use when they are assembled into finished gyrocompasses in the United States. Although a change in a product’s name is the weakest evidence of a substantial transformation, *Uniroyal, Inc. v. United States*, 3 CIT 220, *aff’d* 703 F.2d 1022 (Fed. Cir. 1983), we note that the name of the imported material will change from ISA to gyrocompass after assembly in the United States. Furthermore, the ISA’s character—or its “mark, sign [or] distinctive quality,” *Energizer Battery Inc. v. United States*, No. 16-116, slip op. at 18 (CIT 2016) (quoting Webster’s Third New Int’l Dictionary of the English Language Unabridged (2002) at 376)—will change from a component capable of taking raw measurements to a calibrated system able to record, collect, and transmit data to a ship’s navigational systems. Finally, the integration of the French-origin ISA into the finished product changes its use from a measurement component to a complete gyrocompass and “attitude reference system that is capable of delivering actionable data integrated into the ship’s navigation and control systems.” Because of the change in name, character, and use that occurs in the United States, and considering the totality of the U.S. assembly operations, amount and importance of U.S. materials, and testing

that will occur in the United States, the country of origin of the gyrocompasses will be the United States for purposes of U.S. Government procurement.

HOLDING:

The country of origin of the gyrocompasses for purposes of U.S. Government procurement will be the United States.

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,

Alice A. Kipel, Executive Director
Regulations & Rulings
Office of Trade