



DEPARTMENT OF HOMELAND SECURITY

U.S. Customs and Border Protection

Notice of Issuance of Final Determination Concerning a Gearmotor

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 gearmotors known as the R47DRE90M4 gearmotors. Based upon the facts presented, CBP has concluded that the country of origin of the R47DRE90M4 gearmotor is the United States for purposes of U.S. Government procurement.

DATES: The final determination was issued on March 16, 2017. 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: Antonio J. Rivera, Valuation and Special Programs Branch, Regulations and Rulings, Office of Trade, at (202) 325-0226.

SUPPLEMENTARY INFORMATION: Notice is hereby given that on March 16, 2017, 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 a certain gearmotor known as the R47DRE90M4 gearmotor, which may be offered to the U.S. Government under an undesignated government procurement contract. This final determination,

HQ H282391, 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 imported components that are used to manufacture the R47DRE90M4 gearmotor are substantially transformed as a result of the assembly operations performed in the United States. Therefore, for purposes of U.S. Government procurement, the United States is the country of origin of the R47DRE90M4 gearmotor.

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: March 16, 2017.

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

Attachment

HQ H282391

March 16, 2017

OT:RR:CTF:VS H282391 AJR

Mr. C. Alexander Cable
SEW-Eurodrive
1275 Old Spartanburg Hwy

Lyman, SC 29365

RE: U.S. Government Procurement; Final Determination; Country of Origin; Gearmotors

Dear Mr. Cable:

This is in response to your letter, dated July 18, 2016, requesting a final determination on behalf of SEW-Eurodrive, Inc. (“SEW USA”), pursuant to subpart B of Part 177, Customs and Border Protection (“CBP”) Regulations (19 C.F.R. § 177.21 *et seq.*). 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.

This final determination concerns the country of origin of the R47DRE90M4 gearmotor (“R47DRE90M4”). We note that SEW USA 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.

FACTS:

SEW-Eurodrive is a group of worldwide companies that provide drive solutions for various applications in the automotive, building materials, and metal processing industry, among others. SEW-Eurodrive GmbH & Co. KG (“SEW Germany”) is the parent company of SEW USA and other SEW-Eurodrive manufacturing plants around the world. SEW USA produces drive solution products, such as gearmotors, in the United States, incorporating SEW-Eurodrive-produced parts acquired from SEW Germany and other parts acquired from third-party vendors.

Gearmotors, such as the R47DRE90M4, are mainly comprised of two subassemblies: a gear box and a motor. Because SEW-Eurodrive applies a modular design to its products, certain components are interchangeable and customizable as necessary to meet specifications. As a result, SEW-Eurodrive gearmotors have over 2.1 million configurations, with the average gearmotor consisting of approximately 100 to 120 individual unique components, such as gears, shafts, housings, stators, rotors, and end-shields.

SEW USA seeks to sell the R47DRE90M4 to the U.S. Government. According to SEW USA, because the configurations may vary, it provides the following representative illustration of the R47DRE90M4 production process.¹

Procurement of Materials:

SEW USA uses over 100 separate parts to assemble the R47DRE90M4. According to SEW USA, many of these parts are acquired from SEW Germany (“SEW Parts”). These parts

¹ SEW USA notes that other models and combinations are assembled similarly to this representative process.

include gears, housings, stators, rotors, shafts, and end shields that are produced at SEW-Eurodrive manufacturing plants in Brazil, China, France, Germany, and the United States, among other designated and non-designated countries. SEW USA states while the majority of the SEW Parts are produced in countries designated and approved pursuant to the TAA, SEW-Eurodrive's "current system of inventory distribution to assembly centers makes it impossible to determine with specificity the country of origin for all component parts." For this reason, many of these SEW Parts are shipped to SEW Germany as inventory and then redistributed according to need.

Additionally, SEW USA acquires other parts from third-party vendors ("Other Parts"). These parts include screws, nuts, bolts, shims, and rings. SEW USA considers the SEW Parts "essential" because they are the parts that SEW-Eurodrive must produce themselves, while the Other Parts are ubiquitous and can be purchased on the open market.

For the gear box subassembly, SEW USA procures the following materials: one pinion; three gears (three types); two pinion shafts (two types); three output shafts (three types); six keys (six types); three oil seals (three types); at least six deep groove ball bearings (six types); eight circlips (eight types); two space tubes (two types); two breather valves (two types); one gear housing; one supporting disc; one eye bolt; one sealing compound; one cylindrical roller bearing; five screw plugs (one type); one gearcase cover; six hex head screws (one type); one gasket; two closing caps (two types); and, at least seven shims (seven types).

For the motor subassembly, SEW USA procures the following materials: one rotor; one snap ring; five retaining rings (five types); four keys (four types); seven flanges (seven types); seven screw plugs (six types); two deep groove ball bearings (two types); eight machine screws (two types); one stator; four hex head screws (one type); four oil seals (four types); four fan guards (four types); two fans (two types); two aluminum fans (two types); one high inertia flywheel; one equalizing ring; one B-side bearing end shield; 20 hexagon nuts (five types); 28 studs (seven types); one oil flinger; one nameplate; two grooved pins (one type); one gasket for lower part; two terminal boxes for lower part (two types); ten screws (four types); one terminal block; three terminal clips (two types); one lock washer; one gasket for cover; one terminal box cover; one identification; one gasket; one drain hole plug; one protection canopy; four distance supports (one type); four pan head screws (one type); synthetic grease (quantity as needed); two bed plate kits (two types); and, one earth/ground terminal kit.

Assembly of the Gearmotor

Once SEW USA receives the materials for the R47DRE90M assembly, the parts are placed into stock locations at the facility in the United States. From there, the parts needed to build the motor subassembly are gathered and taken to the assembly cell. SEW USA then assembles the motor subassembly in accordance with the following standard:

- (1) the A-side end shield is heated;
- (2) the rotor is cleared and inspected;
- (3) two bearings are pressed onto the rotor shaft, and secured with hardware;
- (4) an oil drain is screwed into the A-side end shield;
- (5) the rotor is pressed into the A-side end shield;
- (6) the stator is placed on top of the rotor and into the end shield;
- (7) the B-side end shield is added along with the mounting hardware;
- (8) the two end shields and the stator are bolted together;
- (9) an oil seal is installed around the shaft and into the B-side end shield;
- (10) a fan is attached to the rotor shaft extension on the B-side and secured with hardware;
- (11) a fan cover is placed over the fan and secured to the stator;
- (12) a terminal box is assembled and attached to the stator with hardware;
- (13) an oil seal is placed in the A-side end shield;
- (14) an oil flinger is placed on the A-side shaft extension; and,
- (15) a pinion gear is placed onto the shaft with hardware to hold it in place.

The completed motor subassembly is visually inspected, and then it is moved to the next assembly location in SEW USA's facility, along with the remaining parts needed to build the gear box subassembly. SEW USA then assembles the gear box subassembly in accordance with the following standard:

- (1) the pinion shaft has a bearing pressed onto it and hardware is then used to ensure accurate placement;
- (2) a spacer is added and then a key;
- (3) the shaft is placed into the housing along with the gear wheel that mates to the motor pinion;
- (4) another bearing is added and the whole input assembly is pressed together in the gear housing;
- (5) the output oil seal is prepared for further assembly;
- (6) the output shaft has a bearing pressed onto it;
- (7) a bearing is pressed into the housing and the output gear wheel is placed on top of it, with hardware holding both parts in place;
- (8) the output shaft is slid into the wheel, bearing, and housing and is then pressed into place;
- (9) hardware and shims are added to both the pinion and output shafts to ensure proper placement within the housing;
- (10) the seals are assembled into the housing;
- (11) the oil plugs are added to the housing; and,
- (12) the inspection cover is placed onto the housing with an eye for moving the unit.

The completed gear box subassembly is then mated together with the motor subassembly to form the R47DRE90M4 gearmotor. The gearmotor is tested to ensure that it runs in the proper manner, and then oil is added per customer specifications and in accordance with the mounting position. Afterwards, the unit is hung and painted. Once dried, the unit is packed with any additional accompanying parts, and shipped to the customer.

According to SEW USA, the entire assembly requires approximately two hours. SEW USA states that this includes several quality checks throughout the process, and that each major action, such as the motor assembly or unit testing, must be signed off to ensure uniform quality of the product. SEW USA indicates that the process requires several skilled workers, who have previous experience or training in mechanics or gearing assembly. Particularly, the workers must have experience and expertise in assembly processes, which require operating presses, proper heating techniques for various tolerance fits, and use of assembly tooling. SEW USA notes the workers are trained until they reach the required proficiency in the operations, and this training process can take several weeks to a few months depending on the complexity of the assembly unit and experience of the worker.

ISSUE:

What is the country of origin of the R47DRE90M4 for the purpose of U.S. government procurement?

LAW AND ANALYSIS:

Pursuant to subpart B of Part 177, 19 C.F.R. § 177.21 *et seq.*, which implements the 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.

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 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. Factors which may be relevant in this evaluation may include the nature of the operation (including the number of components assembled), the number of different operations involved, and whether a significant period of time, skill, detail, and quality control are necessary for the assembly operation. *See* C.S.D. 80-111, C.S.D. 85-25, C.S.D. 89-110, C.S.D. 89-118, C.S.D. 90-51, and C.S.D. 90-97. If the manufacturing or combining process is a minor one which leaves the identity of the article intact, a substantial transformation has not occurred. *Uniroyal, Inc. v. United States*, 3 CIT 220, 542 F. Supp. 1026 (1982), *aff'd* 702 F. 2d 1022 (Fed. Cir. 1983).

In order to determine whether a substantial transformation occurs when components of various origin 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, extent and nature of post-assembly inspection and testing procedures, and the degree of skill required during the actual manufacturing process may be relevant when determining whether a substantial transformation has occurred. No one factor is determinative.

In a number of rulings (*e.g.*, Headquarters Ruling Letter ("HRL") 735608, dated April 27, 1995, and HRL 559089, dated August 24, 1995), CBP has stated: "in our experience these inquiries are highly fact and product specific; generalizations are troublesome and potentially misleading. The determination is in this instance 'a mixed question of technology and Customs law, mostly the latter.'" *Texas Instruments, Inc. v. United States*, 681 F.2d 778, 783 (CCPA 1982).

SEW USA contends that the various components, imported into the United States for assembly of the R47DRE90M4, are substantially transformed during the processing which occurs in the United States. SEW USA notes that the assembly process is complex, requiring skilled workers, and that the various components cannot function until assembled into the completed gearmotor. In support, SEW USA cites to HRL 563236, dated July 6, 2005; HRL

557208, dated July 24, 1993; HRL 734979, dated September 3, 1993; HRL 73046, dated May 10, 1991; HRL 734560, dated July 20, 1992; HRL 559067, dated September 19, 1995; and, New York Ruling (“NY”) 872132, dated April 9, 1992.

While the cases cited by SEW USA consider whether imported parts were substantially transformed due to assembly operations in the United States, the assembled products in these cited cases were telephones, except for NY 872132 (holding that Japanese gear boxes were substantially transformed in the United States when assembled with electronic motors to create a gearmotor). Similar to NY 872132, we note the following rulings, which we find are more analogous to the situation in this case.

In HRL 559703, dated August 23, 1996, numerous parts were sourced from vendors located in the United States and/or other countries. These parts were then assembled into various subassemblies, and then these subassemblies were assembled into aircraft engines, ultimately involving thousands of individual parts and a complex operation requiring specialized skill and expertise. It was held that these parts were substantially transformed as a result of the operations performed in the United States, leading to the production of an aircraft engine.

In HRL H022169, dated May 2, 2008, a glider (consisting of a frame, finished cab, axels, and wheels) was imported into the United States and assembled with approximately 87 different component parts (including the essential parts: a motor, controller, and charger of Canadian origin; a gear box and axel of U.S. origin; and brakes of Indian origin) into an electric mini-truck. The process consisted of eight assembly work stations involving attachment and installation operations, as well as quality control and testing of the product. It was held that the imported glider and other foreign components were substantially transformed into an electric mini-truck by the assembly operations that took place in the United States. *See also* HRL 558919, dated March 20, 1995 (holding that an extruder subassembly manufactured in England was substantially transformed in the United States when it was wired and combined with U.S. components (motor, electrical controls and extruder screw) to create a vertical extruder, particularly noting that the imported extruder and U.S. components were functionally necessary to the operation of the vertical extruder); HRL H075667, dated January 21, 2010 (holding that 53 components were substantially transformed into an alternator by the assembly operations in the United States, noting the 169 minute, 31 step process involving skilled workers and the U.S.-origin of the regulator component); and, HRL 734292, dated May 26, 1992 (holding that imported components and subassemblies were substantially transformed into electronic motors in the United States, noting the U.S. origin of the stator component because of the extensive experience required for production of the stator).

In this case, we find that the imported parts are substantially transformed as a result of the assembly operations in the United States. We note that building the R47DRE90M4 in the United States consists of assembling together 131 unique parts, and at least a total of 200 parts. Similarly to HRL 559703 and HRL H022169, production of the R47DRE90M4 requires importing numerous parts of various origins, which are used to first assemble the gear box and motor subassemblies, and then to assemble the complete gearmotor, through a complex operation

with specialized skill and expertise. As noted in HRL H075667 and HRL 734292, the complex operation in this case involves at least 27 steps that take approximately two hours. We note that SEW USA's workers are hired with previous experience in mechanical fields, and undergo additional training by SEW USA, which may endure several weeks to a few months, in order to reach the proficiency in the assembly operations that is required by the company. Under the described assembly process, the foreign components lose their individual identities and become an integral part of a new article, the R47DRE90M4, possessing a new name, character and use. Based upon the information before us, we find that the components that are used to manufacture the R47DRE90M4 are substantially transformed as a result of the assembly operations performed in the United States, and that the country of origin of the R47DRE90M4 for government procurement purposes is the United States.

HOLDING:

The components that are used to manufacture the R47DRE90M4 are substantially transformed as a result of the assembly operations performed in the United States. Therefore, the country of origin of the R47DRE90M4 for government procurement purposes is 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 and Rulings
Office of Trade