DEPARTMENT OF HOMELAND SECURITY

U.S. CUSTOMS AND BORDER PROTECTION

Notice Of Issuance Of Final Determination Concerning

Certain Data Protection Software Products

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

DATES: The final determination was issued on February 12, 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 no later than [INSERT 30 DAYS FROM DATE OF
PUBLICATION IN THE FEDERAL REGISTER].

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

SUPPLEMENTARY INFORMATION: Notice is hereby given that on February 12, 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
data protection software products known as WebALARM, WebALARM [Embedded], TheGRID
Basic, and TheGrid Beacon, which may be offered to the U.S. Government under an
undesignated government procurement contract. This final determination, HQ H268858, 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 results in a substantial transformation. Therefore, the country of origin of the software products is the United States 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: February 12, 2016.

Joanne Roman Stump,
Acting Executive Director,
Regulations and Rulings,
Office of International Trade.

Attachment

HQ H268858

February 12, 2016

OT:RR:CTF:VS H268858 RMC

CATEGORY: Country of Origin

Dan Minutillo
Minutillo: A Law Corporation
841 Blossom Hill Road
Second Floor
P.O. Box 20698
San Jose, CA 95160

Re: U.S. Government Procurement; Country of Origin of Data Protection Software; Substantial
        Transformation

Dear Mr. Minutillo:

        This is in response to your letter dated August 18, 2015, requesting a final determination on
behalf of e-Lock Corporation ("e-Lock") pursuant to Subpart B of Part 177 of the U.S. Customs
and 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 four data-protection
software products. As a U.S. importer, e-Lock 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:

        E-Lock is a Malaysia based developer of cyber-security software that helps to prevent
identity theft and threats to data integrity. This request concerns four software products that e-Lock
wishes to offer for sale to the federal government: (1) WebALARM; (2) WebALARM [Embedded];
(3) TheGRID Basic; and (4) TheGRID Beacon. The WebALARM products are designed to protect
files and data from unauthorized changes. The two products are similar except that WebALARM
[Embedded] is embedded to become part of an integrated security package. TheGRID products
provide user-identification and authentication functionality and are designed to protect against
online theft by providing two-factor authentication and optional mutual authentication. The two
products are similar except that TheGRID Beacon is designed for mobile applications.

All four software products are produced using the same three-step process that essentially involves: (1) writing the source code in Malaysia; (2) compiling the source code into usable object code in the United States; and (3) installing the finished software on U.S.-origin discs in the United States.

In a submission dated October 15, 2015, e-Lock provided additional information on the processes involved in creating source code and compiling it into object code in steps (1) and (2).

1. Writing e-Lock Source Code
    a. Creating new source code project in e-Lock's source code repository server;
    b. Using tools like Microsoft Visual Studio, Android Studio, Eclipse, Xcode, and Text Editors, e-Lock's software programmer starts writing computer code in C++, Java, and Objective-C languages;
    c. Designing graphical layout using Visual Studio, Android Studio, or Xcode; and
    d. (b) and (c) above are prepared and checked into source code repository server.

2. Compiling e-Lock Source Code into Object Code
    a. The software builder signs into the continuous integration ("CI") server and performs a "build" action;
    b. The CI server immediately checks out the latest version of source code from the repository server and performs compilation process;
    c. Source code is then compiled into machine code for each relevant platform on Windows, Linux, Android, and iOs;
    d. Incompatibilities or errors during compilation are handed; and
    e. Source code is verified or rectified as needed.

After e-Lock's engineers compile the source code into object code in the United States, the continuous integration server automatically constructs installation packages for testing and executable files for various platforms. Finally, a plan for testing is developed and engineers perform software testing, unit and/or integration testing, regressions and/or performance testing, and acceptance testing. If the code passes the tests described above, the software-development phase is complete.

E-Lock also provided information on the costs and time associated with writing the source code in Malaysia and compiling the object code in the United States. E-Lock also noted that U.S.-based subcontracts and personnel install, distribute, and provide technical support for the finished products after sale.

E-Lock argues that the Malaysian source code is substantially transformed when it is compiled into usable object code in the United States and that the country of origin for government-procurement purposes is thus the United States.

ISSUE:

Whether the four software products are products of the United States for government-procurement purposes.

LAW & 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 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 Procurement Regulations. *See* 19 C.F.R. § 177.21. In this regard, CBP recognizes that the Federal Procurement 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. The Federal Procurement Regulations define "U.S.-made end product" as:

[A]n 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 distin0ct from that of the article or articles from which it was transformed.

See 48 C.F.R. § 25.403(c)(1).

The issue in this case is whether e-Lock's Malaysian-developed source code is substantially transformed in the United States when engineers compile it into object code and load it onto U.S.-origin disks. E-Lock argues that the source code is "substantially different in nature, function, name and character than the final product after code compilation." Thus, according to e-Lock, the finished software is substantially transformed in the United States and the country of origin for government-procurement purposes is the United States.

The "source code" written in Malaysia and the "object code" compiled in the United States differ in several important ways. Source code is a "computer program written in a high level human readable language." *See, e.g.*, Daniel S. Lin, Matthew Sag, and Ronald S. Laurie, *Source Code versus Object Code: Patent Implications for the Open Source Community*, 18 Santa Clara High Tech. L.J. 235, 238 (2001). While it is easier for humans to read and write programs in "high level human readable languages," computers cannot execute these programs. *See* Note, *Copyright Protection of Computer Program Object Code*, 96 Harv. L. Rev. 1723, 1724 (1983). Computers can execute only "object code," which is a program consisting of clusters of "0" and "1" symbols. *Id.* Programmers create object code from source code by feeding it into a program known as a "compiler." *Id.* Thus, step (1), the writing of source code in Malaysia, involves the creation of computer instructions in a high level human readable language, whereas step (2), which is performed in the United States, involves the compilation of those instructions into a format that computers can execute.

CBP has consistently held that conducting a "software build"—i.e., compiling source code into object code—results in a substantial transformation. *See, e.g.*, Headquarters Ruling ("HQ") H192146, dated June 8, 2012 (holding that "software is substantially transformed into a new article with a new name, character and use in the country where the software build is performed"). For example, e-Lock cites HQ H243606, dated Dec. 4, 2013, in which an importer developed DocAve Software, a comprehensive suite of applications for Microsoft SharePoint, in both the United States and China. While most of the source code was programmed in China, the source code was compiled into object code (i.e., "built") in the United States. CBP held that "the software build performed in the U.S. substantially transforms the software modules developed in China and the U.S. into a new article with a new name, character and use . . .". The country of origin of DocAve Software was thus the United States for purposes of U.S. Government procurement.

As in H192146 and H243606, e-Lock also conducts a software build in the United States. This process is sufficient to create a new article with a new name, character and use: the name of the product changes from source code to object code, the character changes from computer code to finished software, and the use changes from instructions to an executable program.

HOLDING:

The country of origin of the finished software products is the United States for purposes of government procurement.

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,

Joanne Roman Stump
Acting Executive Director
Regulations & Rulings
Office of International Trade

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