ASML US, Inc.

8555 S. River Pkwy
Tempe, AZ 85284
U.S.A.

Phone 1-480-383-4722
Steve.Lita@asml.com
www.asml.com

Mr. Timothy Mooney
Regulatory Policy Division
Room 2099B
Bureau of Industry and Security
U.S. Department of Commerce
14th Street & Pennsylvania Ave., N.W.
Washington, D.C. 20230

Date August 3, 2012
Reference
Subject "Specially Designed" Definition (*Federal Register* Notice of June 19, 2012; RIN 0694-AF66)

Dear Mr. Mooney:

ASML US, Inc. ("ASML") is pleased to submit to the Commerce Department's Bureau of Industry and Security ("BIS") the following comments on BIS's proposed revised definition of 'specially designed" ("Proposed Definition").[1] As detailed below, ASML urges that BIS further improve the Proposed Definition.

Background

ASML, headquartered in Tempe Arizona, is an indirect subsidiary of ASML Holding N.V. ("ASML NV"). At its plant in Wilton, Connecticut, ASML manufactures certain components and accessories for the semiconductor lithography system produced by ASML Netherlands B.V. (ASML NL), another subsidiary of ASML NV.

ASML NL assembles all of its semiconductor lithography systems (scanners and steppers) in Veldhoven, The Netherlands. While all of ASML NL's complete semiconductor lithography products are of Dutch origin, ASML NL sources parts, components and accessories for its products from a number of countries, including the United States.

ASML exports components and accessories to

(i) ASML NL to be incorporated into ASML NL semiconductor lithography systems;

(ii) ASML NV locations around the world to be held in reserve as spares and replacements; and

(iii) ASML NL customer sites around the world to be used for the immediate replacement of defective parts or to upgrade or improve the performance of systems.

[1] "Specially Designed" Definition, 77 Fed. Reg. 36,409 (June 19, 2012) ("Proposed Definition").

I. While the Proposed Definition of "Specially Designed" Has Improved, It Remains Unduly Complex, Flawed and Unnecessary

A. BIS Has Adopted Several Positive Elements in its New Definition

The Proposed Definition contains several improvements over the initial definition of "specially designed" advanced by BIS. Specifically:

- "Capable of" is explicitly eliminated as a possible meaning of "specially designed;"
- The control status of a component is much more closely tied to the control status of the end item(s) into which the component is incorporated, and, generally speaking, only components required for the function of controlled end items generally are deemed "specially designed" and worthy of control; and
- If a component is incorporated into two ends items of differing control status, then the component generally would not be deemed "specifically designed."

ASML applauds all of these improvements and hopes that they will be retained in the final rule implemented by BIS.

B. Nevertheless, the Proposed Definition Has Several Flaws

1. A "Catch-and Release" Methodology Is Misguided and Overly Complicated

BIS's reliance on a "catch-and-release" methodology for determining which items are "specially designed" is unnecessary and significantly complicates the "specially designed" definition. BIS should not determine virtually every component and every accessory to be "specially designed" before excluding certain groups of components and accessories from that definition. The plain meaning of the term "specially designed" cannot be squared with the concept of capturing all (or virtually all) components and accessories, only to "release" certain of those items after further analysis.

In paragraph (a)(1) of the Proposed Definition, BIS employs a straightforward positive definition of "specially designed" that adheres closely to the natural and commonly-understood meaning of that term: a "specially designed" item is one that

> [H]as properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph.[2]

This definition captures all items that need to be captured without any need to "release" items based on exclusions. The definition is understandable, easy to administer and corresponds to the normal meaning of the term "specially designed" when used as control criterion. There is no apparent reason to go beyond this definition, and BIS should not do so.

Insofar as the Proposed Definition does not tie the control status of a component or accessory to the critical parameters of the end item in which the component is incorporated or with which the

[2] Proposed Definition at 36,418.

accessory is used it diverges from the plain meaning of "specially designed." Such divergence should be avoided by limiting the definition of 'specially designed" to a modified version of paragraph (a)(1) of the Proposed Definition.

2. The Proposed Definition Does Not Increase Certainty or Objectivity

The portion of the Proposed Definition dealing with components and accessories is not certain or objective. First, the "catch-and-release" nature of the Proposed Definition is far more complex than a straightforward positive definition of "specially designed." Second, several of the terms employed in the Proposed Definition, such as "reasonable expectation," are undefined and so are inherently subjective.

II. A Positive Definition of "Specially Designed" for all Items Would Be Simpler, Easier to Understand, and in Keeping With the Natural Understanding of That Term

BIS should implement a positive definition of "specially designed" for all items based on a modified version of paragraph (a)(1) of the Proposed Definition. Such a definition would be far more objective and more straightforward to administer. Moreover, such a positive definition would be consistent with the principle that only a particular subset of items are "specially designed."

The following revised version of paragraph (a) of the Proposed Definition is all that is required and should be implemented by BIS:

An "item" is "specially designed" if, as a result of "development," it:

(a) is an end item having properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph , or

(b) is an application-specific part, component, accessory or attachment having properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions of an end item enumerated in the relevant ECCN or U.S. Munitions List (USML) paragraph; or

(c) is an application-specific part, component, accessory or attachment used predominantly in or with an enumerated end item for which no performance level, characteristic or function is listed on the USML or CCL

Such a positive definition appropriately would place all items on an equal footing and would obviate the need for any exclusions or "release" of items that are obviously not designed specially.

III. The Proposed Definition of "Specially Designed" Would Be Burdensome and Cause Confusion

A. The Proposed Definition Would Require Export Licensing of Many More Components and Accessories Than Would a Positive Definition

Because it diverges from the natural meaning and understanding of "specially designed," the Proposed Definition would increase the licensing burdens of exporters far more than would a positive definition of "specially designed" akin to the one provided above. That would be true not only because the Proposed Definition likely would deem significantly more parts and components to be "specially designed" than would a positive definition based on a "peculiarly responsible" standard, but also because the coverage of the Proposed Definition would be far more complex

and difficult to decipher than would the coverage of a positive definition based on a "peculiarly responsible" standard, and cautious exporters willing to avoid export violations would have to expand their licensing beyond what might be necessary in an abundance of caution.

B. The Proposed Definition Would Impact Firms' Ability to Use Foreign Suppliers

To the extent that the Proposed Definition would yield a larger universe of parts, components and accessories either requiring an export license or potentially requiring an export license than would a positive definition of "specially designed" akin to the one provided above, the Proposed Definition, if implemented, would adversely impact exporters' ability to use foreign suppliers. While it might be the case that foreign suppliers could be used if licenses were obtained or all of the requirements for license exceptions were met, many foreign suppliers are reluctant or unwilling to submit themselves to the burden and restrictions associated with license conditions or obtaining letters of assurance associated with License Exception TSR. Accordingly, the actual or potential expansion of export controls associated with the implementation of the Proposed Definition, rather than a more straightforward, positive "specially designed" definition would dissuade certain foreign suppliers from interacting with U.S. exporters and thereby increase the administrative and/or production costs of those exporters.

C. The Proposed Definition Would Negatively Impact Firm's Ability to Hire and Interact With Foreign Nationals

To the extent that the Proposed Definition would yield a larger universe of parts, components and accessories either requiring an export license or potentially requiring an export license than would a positive definition of "specially designed" akin to the one provided above, the Proposed Definition, if implemented, would expand the scope of technical information deemed to be controlled technical data beyond what should be the case and for that reason would expand the need for deemed export licenses beyond what should be the case. Given the prevalence of foreign nationals among employees of high tech firms such as ASML, deemed export licensing requirements are of paramount importance to high tech firms actively engaged in development of new products. Any expansion of deemed export license requirements beyond what they should be (or would otherwise be) could significantly undercut ASML's and other high tech firm's ability to hire and retain foreign national employees — and in so doing undercut those firms' ability to remain at the cutting edge of product development.

D. The Proposed Definition Is Unilateral and Would Lead to Confusion Concerning the Proper Classification of Reexports

The Proposed Definition was developed on a unilateral basis and may not be consistent with the Wassenaar Arrangement. It remains an open question whether all parts, components and accessories deemed "specially designed" for controlled end items under the Proposed Definition would be deemed "specially designed" and controlled by other Wassenaar Arrangement countries. Given this uncertainty, there would be confusion and lack of clarity as to whether foreign-produced components and accessories treated as uncontrolled by the foreign government would be, in effect, re-classified as "specially designed" and controlled once imported into the United States and prepared for export.

The lack of clarity as to these matters could cause sizeable administrative and bureaucratic problems for companies such as ASML that function as part of a global supply chain. What's more, that would remain the case even if the Proposed Definition were ultimately adopted by the Wassenaar Arrangement unless there were little or no lag between the adoption of the definition by the United States and the adoption of the definition by the Wassenaar Arrangement.

E. By Negatively Impacting Global Supply Chains, The Proposed Definition Would Encourage Exporters to Move Operations Outside of the United States

The high technology sector, of which ASML is a part, is global and relies on a global supply chain, with production of parts and components, assembly and testing often occurring in different countries. The success and efficiency of a global supply chain depends upon minimizing the constraints to international trade in parts, components and finished products — whether they be tariffs, non-tariff barriers, import licensing or export licensing. Generally speaking, firms employing a global supply chain will tend to avoid countries with barriers to trade, while gravitating towards countries with fewer barriers to trade.

To the extent that the Proposed Definition could impose greater export licensing requirements on various parts, components and accessories employed in or with high technology products (such as those made by ASML and its affiliates) than would a positive definition of "specially designed" akin to the one provided in section II above, the Proposed Definition would discourage companies employing a global supply chain (such as ASML) from including the United States in their global supply chain. If parts and components that are free of export controls in foreign markets were deemed "specially designed" and therefore export licensable under the Proposed Definition, then U.S. companies such as ASML would be discouraged from maintaining an inventory of such parts and components used both to supply foreign affiliates producing finished products and to supply spare parts to their customers — because re-exports of such parts and components would be subject to export licensing.

ASML prides itself on being the only U.S. company within the semiconductor lithographic equipment industry. However, ASML NV's business model depends on a global supply chain and factors that decrease the efficiency and smooth functioning of that global supply chain of a great concern to the ASML NV. Especially in the current economic environment, the U.S. Government should be careful not to implement policies that will discourage global companies from including the U.S. in their global supply chain and, potentially, encourage those companies to move their current U.S. operations overseas. ASML recognizes that export controls are required and, more specifically, that a definition of "specially designed" is needed to clarify those controls. However, ASML cautions BIS not to implement a definition of "specially designed" that is convoluted and expansive and that has the potential, if not the likelihood, of subjecting far more parts, components and accessories to export controls than would otherwise be the case.

IV. If a "Catch-and-Release" Methodology Is Retained, then Modifications Should Be Made to the Current Structure

A. BIS Should Clarify That Paragraph (a)(1) Applies to Components Within ECCNs Containing Performance Levels, Characteristics or Functions Within Their Descriptions, and that Paragraph (a)(2) Is Complementary to, Not Additive with, Paragraph (a)(1)

BIS notes that paragraph (a)(2) of the Proposed Definition is

> [S]imilar to (a)(1), but . . . must be listed separately because not all descriptions of commodities on the . . . CCL include performance levels, characteristics, or functions as a basis for control.[3]

This discussion suggests that paragraph (a)(2) is intended to pertain only to parts and components that cannot be covered by paragraph (a)(1) because they exist within ECCNs that do not include performance levels, characteristics, or functions as a basis for control. ASML recognizes that it may not be possible for paragraph (a)(1) as drafted to pertain to items within ECCNs that lack

[3] Proposed Definition at 36,412.

performance levels, characteristics, or functions as a basis for control. However, paragraph (a)(1) should pertain to all other parts and components. Furthermore, paragraph (a)(2) should pertain exclusively to parts and components not covered by paragraph (a)(1). That is, paragraph (a)(2) should pertain exclusively to parts and components falling within ECCNs that lack performance levels, characteristics, or functions as a basis for control.

These elements of the "catch" portion of the Proposed Definition should be clarified in order to avoid confusion, increase the objectivity of the definition and move the definition closer to the natural meaning of the term "specially designed." Accordingly, paragraphs (a)(1) and (a)(2) of the Proposed Definition should be modified as follows:

(1) **Is an end item having** ~~Has~~ properties peculiarly responsible for achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or U.S. Munitions List (USML) paragraph**, or is a part or component incorporated into an enumerated end item and having properties peculiarly responsible for the enumerated end item achieving or exceeding the performance levels, characteristics, or functions in the relevant ECCN or USML paragraph** ; **or**

(2) Is a part or component **incorporated into an enumerated end item appearing within an ECCN or USML category lacking performance levels, characteristics, or functions as a basis for control and is** necessary for **the** ~~an~~ enumerated **end item** ~~or referenced commodity or defense article~~ to function as designed;

Alternatively, if BIS chooses to retain the current form of paragraph (a) of the Proposed Definition, it should, at a minimum, include the following new Note to paragraph (a)(2):

Note to paragraph (a)(2): This paragraph pertains only to parts and components incorporated into enumerated end items within ECCNs or USML categories lacking performance levels, characteristics, or functions as a basis for control. All other parts and components are subject to paragraph (a)(1).

There is no justification provided or available for most parts and components to be excluded from the coverage of paragraph (a)(1) of the Proposed Definition, and there is no justification provided or available for any part or component to be subjected to *de facto* "double jeopardy" by being included within the coverage of both paragraph (a)(1) and paragraph (a)(2). If paragraph (a)(1) pertains to an item and if that item falls outside of the definition provided by that paragraph then the item should not be deemed "specially designed"; it would be illogical and unreasonable for the item to then have to pass a second "specially designed" test.

The modifications provided above would ensure that paragraph (a)(1) — the centerpiece of the "specially designed" definition and the component of that definition coming closes to capturing the natural meaning of the term — would apply in as many situations as possible and would resolve the issue of whether an item is "specially designed" as quickly and simply as possible.

B. Alternatively, BIS Should Add a Note Clarifying that for ECCN 3B001.f.1 only Components Peculiarly Responsible for Achieving the Control Parameters Are "Specially Designed"

There are only three producers worldwide of equipment falling within ECCN 3B001.f.1 — ASML NV, Canon Inc. and Nikon Corporation. Of those three producers, only ASML NV involves the United States in its global supply chain. Accordingly, any expansion of U.S. export controls beyond the level reasonable and necessary is a significant burden to ASML NV's global

competitiveness. ASML therefore urges BIS to ensure that export controls on parts and components incorporated into semiconductor lithographic equipment covered by ECCN 3B001f.1 are limited to those items that are peculiarly responsible for achieving of exceeding the control parameters laid out in that ECCN. This may be achieved either by implementing the modifications to the Proposed Definition discussed in sections II and V.A above, or by adding a new Note to the "specially designed" definition stipulating that for parts and components incorporated into the equipment covered by ECCN 3B001f.1 only those parts and components that are peculiarly responsible for achieving of exceeding the control parameters laid out in that ECCN are "specially designed."

C. BIS Should Revise Paragraph (b)(3) to Eliminate "Form and Fit"

The exclusion contained in paragraph (b)(3) of the Proposed Definition is limited to parts, components, accessories and attachments with the "same form, fit and performance capabilities" as parts, components, accessories or attachments used in or with an non-enumerated end item. While the requirement that items have the same performance capabilities is well-reasoned and appropriate, the requirement that items have the same form and fit is baseless and inappropriate. Form and fit are inherently superficial and non-substantive characteristics and as such should play no role in the control status of a part, component, accessory or attachment. Two components or accessories that have the same performance capabilities should be deemed to be substantively identical and therefore worthy of the same (lower) control status, regardless of any differences in form and fit between the two items.

D. These Suggested Modifications to the Proposed Definition Should Pose Little Risk to National Security

The semiconductor lithography equipment market is very small, both on the supply and demand sides. As noted above, only three companies manufacture high-end scanners and steppers controlled under 3B001.f.1, and all three of those companies are located in counties party to the Wassenaar Arrangement. In addition, the primary customers for high-end scanners and steppers are well-known integrated circuit manufacturers and foundries such as: Intel Corporation, Micron Technology, Inc., GLOBALFOUNDRIES Inc., Freescale Semiconductor, Toshiba Corporation, Sony Corporation and Samsung. These companies tend to be located in a few countries. The products made using ASML's lithography products are overwhelmingly general purpose and civil. Accordingly, the modifications to the Proposed Definition suggested here should have little or no impact on national security — at least *vis*-à-*vis* equipment covered by ECCN 3B001.f.1.

The high-end scanners and steppers sold to customers around the world are of either Dutch or Japanese origin. Imposing export controls on U.S.-manufactured components and accessories incorporated into ASML NV's Dutch-made systems is unnecessary, particularly since the U.S-origin components and accessories are not of sufficient value to trigger the *de minimis* threshold.

V. BIS Should Create a License Exception for Intra-Company Transfers

Regardless of the extent to which BIS adopts the suggestions discussed above, the agency should create a new license exception for intra-company transfers. To a certain extent, intra-company transfers may be covered by license exception Strategic Trade Authorization ("STA"), but that license exception does not cover all intra-company transfers and using a License Exception in the case of intra-company transfers is unduly burdensome, difficult and should be wholly unnecessary given the close interaction between ASML and its affiliates. ASML generally exports parts, components and technical information only to other subsidiaries of ASML NV and only for incorporation into or use with equipment made by ASML NV subsidiaries (either into new

equipment or as replacement or spare parts to previously-produced equipment). Third parties are rarely involved.

ASML and other, similarly-situated companies that operate globally must contend with substantial case by-case export licensing requirements for intra-company transfers. This licensing activity covers "deemed exports" of technology to foreign national employees as well as actual exports and re-exports of commodities and technologies to foreign subsidiaries. The intra-company transfers covered by this activity tend to be repetitive and low risk transactions that require an inordinate and burdensome amount of export licensing activity and resources.

However defined, the level of risk associated with intra-company transfers is far lower than the level of risk associated with inter-company sales. That fact should be taken into account, and a license exception for intra-company transfers should be established.

ASML acknowledges that BIS previously considered the creation of an intra-company transfer ("ICT") license exception.[4] ASML encourages BIS to make any new license exception ICT less burdensome to fulfill.

* * *

ASML is committed to export control reform, and appreciates the opportunity to provide these comments.

Sincerely,

Stephen J. Lita
Senior Trade and Customs Specialist

[4] Export Administration Regulations: Establishment of License Exception Intra-Company Transfer (ICT), 73 Fed. Reg. 57,554 (Oct. 3, 2008).