

UNITED STATES COURT OF INTERNATIONAL TRADE

MITSUBISHI POWER AMERICAS, INC.,

Plaintiff,

v.

UNITED STATES,

Defendant.

Before: Jane A. Restani, Judge

Court No. 21-00573

**OPINION AND ORDER**

Dated: April 29, 2025

[In a Customs classification matter, judgment issued declaring classification other than as claimed by the parties.]

Serhiy Kiyasov, Rock Trade Law, LLC, of Chicago, IL, argued for the plaintiff Mitsubishi Power Americas, Inc. With him on the brief were Eric Roland Rock and Thomas Michael Keating.

Luke Mathers, International Trade Field Office, Commercial Litigation Branch, Civil Division, U.S. Department of Justice, of New York, NY, argued for the defendant. With him on the brief were Brett A. Shamute, Acting Assistant Attorney General, Patricia M. McCarthy, Director, and Justin R. Miller, Attorney-In-Charge. Of counsel on the brief was Michael Andrew Anderson, Office of the Assistant Chief Counsel, International Trade Litigation, U.S. Customs and Border Protection, of New York, NY.

Restani, Judge: Before the court are cross-motions for summary judgment. Pl.’s Mem. of Law in Support of Confidential Mot. for Summ. J., ECF No. 55 (Aug. 21, 2024) (“Pl.’s MSJ”); Def.’s Confidential Cross-Mot. for Summ. J. and Resp. in Opp. to Pl.’s Mot. for Summ. J., ECF No. 64 (Dec. 13, 2024) (“Def.’s MSJ”). Plaintiff Mitsubishi Power Americas, Inc. (“Mitsubishi”) challenges the United States Customs and Border Protection’s (“Customs”) classification of selective catalytic reduction (“SCR”) catalyst blocks under heading 8421 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Pl.’s MSJ at 4. At issue is whether the SCR catalyst

blocks imported by Mitsubishi fall under heading 8421, “Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof,” or heading 3815, “Reaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included,” of the HTSUS. Broadly, Mitsubishi argues that because the SCR catalyst blocks are made of a combination of active catalytic chemical compounds and support material, the SCR catalyst blocks are properly classified under subheading 3815.19.00, HTSUS. Pl.’s MSJ at 12–13. The United States (“government”) contends that SCR catalyst blocks serve as a gas filtering or purifying apparatus; thus, subheading 8421.39.80, HTSUS, is appropriate. Def.’s MSJ at 2, 13. For the reasons laid out below, the court concludes that neither classification is correct, and the SCR catalyst blocks are properly classified under subheading 8421.99.00, HTSUS, as parts of a gas filtering or purifying apparatus. Further, Mitsubishi’s claim of equitable estoppel fails as no misrepresentation by the government occurred.

## **BACKGROUND**

### **I. Procedural Background**

There are no material factual disputes in this case. Pl.’s Statement of Undisputed Material Facts at 1, ECF No. 55-2 (Aug. 21, 2024) (“Pl.’s SMF”); Def.’s Statement of Material Facts at 1, ECF No. 64-1 (Dec. 13, 2024) (“Def.’s SMF”). The subject merchandise in question are SCR catalyst blocks. Pl.’s SMF at ¶ 14; Def.’s SMF at ¶ 2. The SCR catalyst blocks are products of China. Def.’s SMF at ¶ 3. Mitsubishi imported the merchandise in multiple entries made from July 2018 to September 2020 under subheading 3815.19.00, HTSUS. Pl.’s SMF at ¶¶ 5–6. Customs classified Mitsubishi’s SCR catalyst blocks under subheading 8421.39.40, HTSUS, and

thus applied a duty rate<sup>1</sup> increase of 25% ad valorem.<sup>2</sup> Id. at ¶¶ 8–9.

Mitsubishi timely protested Customs’ classification of the SCR catalyst blocks and argued the SCR catalyst blocks are properly classified under subheading 3815.19.00 because the SCR catalyst blocks facilitate and sustain the reaction of nitrous oxides (“NOx”) and ammonia. Pl.’s SMF at ¶ 10; see Def.’s MSJ at 2, 8. Mitsubishi further argues that classification of the SCR catalyst blocks under subheading 3815.19.00 prevents the SCR catalyst blocks from being subject to Section 301<sup>3</sup> duties under secondary heading 9903.88.03 due to exclusions issued by the Office of the United States Trade Representative (“USTR”) that apply to goods classified under subheading 3815.19.00, HTSUS. Amended Summons at 2, ECF No. 10 (Nov. 5, 2021); Def.’s MSJ at 8. Customs denied Mitsubishi’s protest. Pl.’s SMF at ¶ 11. Mitsubishi commenced this action to challenge Customs’ classification. Compl. at 1, ECF No. 11 (Jan. 4, 2022).

## **II. Description of Subject Merchandise**

The SCR catalyst blocks at issue are made of approximately sixteen individual catalyst units held together by a metal frame that includes a protector, a set of seal bars, and a seal plate.

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<sup>1</sup> The duties at issue were not imposed until September 2018. See note 3.

<sup>2</sup> Subheading 8421.39.40, HTSUS, covers “Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof: Other: Catalytic Converters.”

<sup>3</sup> Section 301 of the Trade Act of 1974 permits the United States to impose trade sanctions on countries that maintain acts, policies, or practices that violate, or deny, U.S. rights or benefits gained pursuant to trade agreements, or are otherwise unjustifiable, unreasonable, or discriminatory, and burden or restrict U.S. commerce. 19 U.S.C.A § 2411. In 2018, pursuant to Section 301, the U.S. Trade Representative conducted an investigation and found that the acts, policies, and practices of China were unreasonable or discriminatory and burdened or restricted U.S. Commerce. Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 83 Fed. Reg. 47974 (Sept. 21, 2018) (“83 Fed. Reg. 47974”); Notice of Modification of Section 301 Action: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 84 Fed. Reg. 20459 (May 9, 2019) (“84 Fed. Reg. 20459”). As a result, the Trade Representative imposed duties on certain products from China. 83 Fed. Reg. 47974; 84 Fed. Reg. 20459.

Pl.'s SMF at ¶¶ 15, 17, 18; Def.'s SMF at ¶ 7, 11. Each catalyst unit contains approximately eighty catalyst plates. Pl.'s SMF at ¶ 16; Def.'s SMF at ¶ 8. The catalyst plates are stainless-steel mesh plates coated in supported catalyst. Pl.'s SMF at ¶¶ 51–52; Def.'s SMF at ¶ 9. The supported catalyst contains an active catalytic compound and a chemical support material. Def.'s SMF at ¶ 13. Two different formulations of the supported catalyst are at issue, one with enhanced mercury oxidation (TRAC type) and one without (CM type). Pl.'s SMF at ¶¶ 68–69; Def.'s SMF at ¶¶ 24–26. Inside the SCR catalyst system, the supported catalyst in the SCR catalyst blocks catalyzes the reaction of harmful NO<sub>x</sub> and ammonia into harmless nitrogen and water. See Pl.'s SMF at ¶ 26.

SCR catalyst blocks are installed into larger SCR catalyst systems, along with an inlet duct, ammonia injector, gas mixer, and outlet duct. Def.'s SMF at ¶ 34. The SCR catalyst system is a component of larger air quality control systems used in coal burning power plants. Pl.'s SMF at ¶ 19; Def.'s SMF at ¶ 60. These SCR systems process flue gas emitted from power plant boilers and other combustion sources. Def.'s SMF at ¶ 30. The SCR system turns harmful NO<sub>x</sub> into harmless byproducts (water and nitrogen). See Pl.'s SMF at ¶ 23; Def.'s SMF at ¶¶ 30, 46. SCR catalyst systems work by first taking flue gas containing harmful NO<sub>x</sub> into the inlet duct and spraying ammonia into the flue gas. Def.'s SMF at ¶¶ 36–37. Then, the ammonia and flue gas are mixed, which allows the flue gas to pass through the SCR catalyst blocks. Id. at ¶¶ 37–39. Once the flue gas passes through the SCR catalyst blocks, the flue gas no longer contains NO<sub>x</sub> as it exits through the outlet duct. Id. at ¶¶ 42–45.

### **JURISDICTION AND STANDARD OF REVIEW**

The court has jurisdiction under 28 U.S.C. § 1581(a) (2018). The court will grant summary judgment motions if “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” USCIT Rule 56(a). Summary judgment is appropriate in tariff

classification cases where “there is no genuine dispute as to the nature of the merchandise and the classification determination turns on the proper meaning and scope of the relevant tariff provisions.” Deckers Outdoor Corp. v. United States, 714 F.3d 1363, 1371 (Fed. Cir. 2013) (citation omitted). The court decides classifications de novo. See 28 U.S.C. § 2640(a)(1); Telebrands Corp. v. United States, 36 CIT 1231, 1234, 865 F. Supp. 2d 1277, 1279–80 (2012).

## DISCUSSION

### I. Legal Framework

The meaning of a tariff term is a question of law, and whether subject merchandise falls under any given tariff term is a question of fact. See Wilton Indus. v. United States, 741 F.3d 1263, 1265–66 (Fed. Cir. 2013) (citations omitted). The plaintiff has the burden of demonstrating that the government’s classification of the subject merchandise is incorrect but does not bear the burden of establishing the correct classification; instead, it is the court’s independent duty to arrive at “the correct result, by whatever procedure is best suited to the case at hand.” Jarvis Clark Co. v. United States, 733 F.2d 873, 876, 878 (Fed. Cir. 1984) (emphasis omitted); see 28 U.S.C. § 2643(b). In making this determination, the court “must consider whether the government’s classification is correct, both independently and in comparison with the importer’s alternative.” Jarvis Clark, 733 F.2d at 878.

In order to determine the meaning of and apply a tariff term to the facts at hand, the court relies on the General Rules of Interpretation (“GRIs”) and, if applicable, the Additional U.S. Rules of Interpretation (“AUSRIs”). Wilton Indus., 741 F.3d at 1266. The court applies the GRIs in numerical order, and only proceeds to each subsequent GRI if “proper classification of the imported goods cannot be accomplished by reference to a preceding GRI.” Id. The first GRI, GRI 1, requires classification to “be determined according to the terms of the headings and any

relative section or chapter notes.” GRI 1, HTSUS. HTSUS chapter and section notes are considered binding statutory law. See BenQ Am. Corp. v. United States, 646 F.3d 1371, 1376 (Fed. Cir. 2011) (citation omitted).

When “a tariff term is not defined in either the HTSUS or its legislative history, the term’s correct meaning is its common or dictionary meaning in the absence of evidence to the contrary.” Russell Stadelman & Co. v. United States, 242 F.3d 1044, 1048 (Fed. Cir. 2001) (citations omitted). In construing tariff terms, the court may “consult lexicographic and scientific authorities, dictionaries, and other reliable information” or may rely on its “own understanding of the terms used.” Baxter Healthcare Corp. v. United States, 182 F.3d 1333, 1338 (Fed. Cir. 1999) (citation omitted). The court will also consider the Explanatory Notes (“ENs”) to the international Harmonized Commodity Description and Coding System (“HTS”)<sup>4</sup> in interpreting HTSUS terms. Carl Zeiss, Inc. v. United States, 195 F.3d 1375, 1378 n.1 (Fed. Cir. 1999). The ENs, however, do not constitute controlling legislative history; they do help to clarify the scope of HTSUS subheadings and to offer guidance in interpreting the HTSUS. Streetsurfing LLC v. United States, 11 F. Supp. 3d 1287, 1294 (CIT 2014) (citations omitted). When interpreting terms of the HTSUS, the court looks to identify what the tariff term would mean if used as part of the “common core language of trade.” Blue Sky Color of Imagination, LLC v. United States, 698 F. Supp. 3d 1243, 1248 (CIT 2024).

## **II. Competing Tariff Provisions**

Customs originally classified the SCR catalyst blocks under subheading 8421.39.40,

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<sup>4</sup> The HTSUS is derived from the HTS, which “provides a common core language for trade.” Marubeni Am. Corp. v. United States, 35 F.3d 530, 533 (Fed. Cir. 1994). Although the ENs are not dispositive of the meaning of the tariff terms, they are “generally indicative of [the] proper interpretation of the various provisions” and so are persuasive on the international meaning of the tariff terms. Carl Zeiss, Inc. v. United States, 195 F.3d 1375, 1378 n.1 (Fed. Cir. 1999).

HTSUS, which reads:

Heading 8421	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof.
	Filtering or purifying machinery and apparatus for gases:
8421.39	Other
8421.39.40	Catalytic converters

HTSUS. The applicable ad valorem duty rate is free. Pl.’s MSJ at 9. Customs liquidated the SCR catalyst blocks under secondary heading 9903.88.02<sup>5</sup> which is subject to an additional 25% duty. Id. at 9.

Mitsubishi alleges that the SCR catalyst blocks should be classified under subheading 3815.19.00, HTSUS, as:

Heading 3815	Reaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included:
	Supported catalysts:
3815.19.00	Other.

HTSUS; Pl.’s MSJ at 9. Further, Mitsubishi argues that the TRAC type SCR catalyst blocks should be classified under secondary heading 9903.88.46,<sup>6</sup> HTSUS, as:

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<sup>5</sup> Subheading 8421.39.40, HTSUS, is a “List 1” tariff classification under the current Chinese Section 301 Tariff Action subject to additional duties. See Notice of Action and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 83 Fed. Reg. 28710-01 (June 20, 2018). Certain articles of subheading 8421.39.40, HTSUS, are subject to additional duties under subheading 9903.88.01 per HTSUS Chapter 99 Notes 20(a) and 20(b). See id.

<sup>6</sup> Subheading 3815.19.00, HTSUS, is a “List 3” tariff classification under the current Chinese Section 301 Tariff Action subject to additional duties. See 83 Fed. Reg. 47974. Certain articles of subheading 3815.19.00, HTSUS, were excluded from the additional duties, including those items under subheading 9903.88.46 and 9903.88.56 per subchapter III of chapter 99 of the HTSUS. See 85 Fed. Reg. 27489-02; 85 Fed. Reg. 48600-01.

Plate-type supported catalysts (reaction accelerators) for reduction of nitrous oxides (NO<sub>x</sub>) with enhanced mercury oxidation, with oxides of base metals being the active substances, applied to a stainless-steel mesh (described in statistical reporting number 3815.19.0000).

See Notice of Product Exclusions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 85 Fed. Reg. 27489-02 (May 8, 2020) ("Exclusion Notice 1"); Pl.'s MSJ at 10. Mitsubishi also argues that the CM type SCR catalyst blocks should be classified under secondary heading 9903.88.56, HTSUS, as:

Plate-type supported catalysts (reaction accelerators) for reduction of nitrous oxides (NO<sub>x</sub>), with base metals being the active substances, applied on a titanium dioxide based ceramic material to a stainless-steel mesh (described in statistical reporting number 3815.19.0000).

See Notice of Product Exclusion Extensions: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 85 Fed. Reg. 48600-01 (Aug. 11, 2020) ("Exclusion Notice 2"); Pl.'s MSJ at 10–11. Finally, Mitsubishi argues that because these two secondary headings apply, Mitsubishi's importation of the TRAC and CM type SCR catalyst blocks should be duty- and tariff-free due to the tariff exclusions provided for in U.S. Notes 20(yy)(19) and (iii)(47) to Chapter 99, HTSUS, and Notes 20(yy)(20) and (iii)(48) to Chapter 99, HTSUS, respectively. Pl.'s MSJ at 9–11.

The government appears to retreat from Customs' original classification of the SCR catalyst blocks under subheading 8421.39.40, HTSUS. See Def.'s MSJ at 13. The government instead argues that the SCR catalyst blocks should be classified under subheading 8421.39.80, HTSUS, as:

Heading 8421	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof:
	Filtering or purifying machinery and apparatus for gases:
8421.39	Other:



8421.39.80                      Other.

Like Customs' original classification, this subsection would make the SCR catalyst blocks subject to additional duties under Section 301, under secondary heading 9903.88.01, HTSUS. Def.'s MSJ at 13.

For the reasons discussed below, the court concludes that the SCR catalyst blocks are classified according to subheading 8421.99.00, HTSUS, as:

Heading 8421                      Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof:

Parts:

8421.99.00                      Other.

Under this subheading, the SCR catalyst blocks remain subject to additional duties under Section 301, under secondary heading 9903.88.01, HTSUS.

**I. The SCR Catalyst Blocks Are Properly Classified Under 8421.99.00, HTSUS**

**a. The SCR catalyst blocks serve as a part under heading 8421 of the HTSUS**

The government contends the SCR catalyst blocks are an apparatus, rather than a part in the larger SCR system. Def.'s Reply, ECF No. 66 at 3–6, (Feb. 7, 2025) (“Def.’s Reply”). Mitsubishi argues that the SCR catalyst blocks are neither an apparatus nor a part under heading 8421, HTSUS. Pl.’s Resp. to Def.’s Cross-Mot. for Summ. J., ECF No. 65 at 5–10, 15–18, (Jan. 17, 2025) (“Pl.’s Resp.”).

Heading 8421 covers “filtering or purifying machinery and apparatus, for liquids or gases; parts thereof.” HTSUS. Neither the HTSUS nor the ENs define the term “part” or “apparatus,” thus, the court looks to the common or dictionary meanings of the terms. See Russell Stadelman & Co., 242 F.3d at 1048 (citations omitted). The Federal Circuit has defined a “part” as either (1)

“an integral, constituent, or component part, without which the article to which it is to be joined could not function as such article,” or (2) “dedicated solely for use with an article.” Bauerhin Techs. Ltd. Pshp. v. United States, 110 F.3d 774, 778–79 (Fed. Cir. 1997) (citation omitted). The common meaning of “part” is “a constituent member of a machine or other apparatus.”<sup>7</sup> Whereas “apparatus” is defined as “a set of materials or equipment designed for a particular use.”<sup>8</sup>

The SCR catalyst blocks at issue in this case are installed into larger SCR reactors that may contain hundreds of SCR catalyst blocks. Def.’s MSJ at 8. The SCR catalyst blocks alone cannot process flue gas, as ammonia from the ammonia sprayer is needed to carry out the chemical reactions necessary to process the gas, thus the SCR catalyst blocks alone are not a material designed for a particular use per the definition of apparatus. See Pl.’s MSJ at 2. Rather, the SCR catalyst blocks are an integral part in the SCR system because the SCR catalyst blocks are required for the catalysis of NO<sub>x</sub>, therefore satisfying the Federal Circuit’s definition of a part. See Def.’s MSJ at 6.

HTSUS Section XVI Note 2 requires that “parts of machines (not being parts of the articles of headings 8484, 8544, 8545, 8546 or 8547) are to be classified according to the following rules”:

(a) Parts which are goods included in any of the headings of chapter 84 or 85 (other than headings 8409, 8431, 8448, 8466, 8473, 8485, 8503, 8522, 8529, 8538 and 8548) are in all cases to be classified in their respective headings;

(b) Other parts, if suitable for use solely or principally with a particular kind of machine, or with a number of machines of the same heading (including a machine of heading 8479 or 8543) are to be classified with the machines of that kind or in heading 8409, 8431, 8448, 8466, 8473, 8503, 8522, 8529 or 8538 as appropriate. However, parts which are equally suitable for use principally with the goods of headings 8517 and 8525 to 8528 are to be classified in heading 8517;

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<sup>7</sup> Part, Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/part> (last visited Jan. 23, 2025).

<sup>8</sup> Apparatus, Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/apparatus> (last visited Jan. 23, 2025).

(c) All other parts are to be classified in heading 8409, 8431, 8448, 8466, 8473, 8503, 8522, 8529 or 8538 as appropriate or, failing that, in heading 8485 or 8548.

HTSUS Note 2. The HTSUS chapter and section notes are considered binding statutory law. See BenQ Am. Corp., 646 F.3d at 1376 (citation omitted). “Note 2(b) establishes that parts are to be classified with the goods with which they are principally used unless such parts have a particular or respective heading as specified by Note 2(a), except for the headings listed in the parentheses in Note 2(a) which are themselves ‘parts’ provisions.” ENI Tech. Inc. v. United States, 33 CIT 1219, 1231, 641 F. Supp. 2d 1337, 1350 (2009) (emphasis omitted). SCR catalyst blocks are used in SCR systems. Pl.’s MSJ at 2. Under Note 2(a), the SCR catalyst blocks are not a good included in any of the headings of chapter 84 or 85 of the HTSUS. Note 2 to sec. XVI, HTSUS. Thus, according to Note 2(b), the SCR catalyst blocks are to be classified with the goods in which they are used: the SCR catalyst system. Id.

**b. The SCR system is a gas purifier under 8421, HTSUS**

Mitsubishi contends that the SCR catalyst blocks do not filter or purify gases because no matter is removed during catalytic conversion of NO<sub>x</sub> to harmless byproducts. Pl.’s Resp. at 11–12. The government argues that the SCR catalyst blocks filter or purify flue gas because NO<sub>x</sub> is converted by the catalysts in the SCR catalyst blocks into nitrogen and water. Def.’s Reply at 2–3.

As the court set forth above, the SCR catalyst blocks are parts in the SCR system and thus this issue turns on whether the SCR system is a gas filter or purifier to be classified under heading 8421. The HTSUS and the ENs do not define the terms “purify” or “filter.” Thus, the court turns to the common or dictionary meanings of the terms. See Russell Stadelman & Co., 242 F.3d at 1048 (citations omitted). The Merriam-Webster Dictionary defines “purify” as “to free from

undesirable elements.”<sup>9</sup> Whereas “filter” is defined as “a porous article or mass . . . through which a gas or liquid is passed to separate out matter in suspension.”<sup>10</sup>

The SCR catalyst system causes harmful NO<sub>x</sub> to be reduced through an oxidation-reduction reaction into harmless nitrogen gas and water. Pl.’s MSJ at 2. Effectively, the SCR system chemically converts the harmful gases into harmless gases. No matter is separated out of the flue gas suspension, thus, the SCR system is not acting as a filter. Rather, the SCR system works as a purifier, essentially freeing the flue gas from the undesirable and harmful NO<sub>x</sub>. Additionally, the two patents involved with the SCR catalyst blocks are U.S. Patent 8,470,728 B2: Exhaust Gas Purifying Catalyst and U.S. Patent 10,898,881 B2: Catalyst for Metal Mercury Oxidation Reactions and Nitrogen Oxide Reduction Reactions, and Exhaust Gas Purification Method. Def.’s MSJ at 7. Both patent names highlight that the SCR system and blocks are involved in gas purification. As purifiers, the SCR system and SCR catalyst blocks, as parts thereof, fall into heading 8421 as gas purification machinery.

Mitsubishi alleges that because the SCR system does not remove any matter while performing the reduction oxidation catalysis, the SCR catalyst blocks cannot be purifiers. Pl.’s Resp. at 11. The ENs, however, explicitly provide a clear example of purification performed through reduction oxidation catalysis. The ENs relay that apparatuses for filtering or purifying gases include “chemical filters and purifiers for air and other gases.” EN 84.21 (II)(B)(4). As noted above, ENs are considered by the court when interpreting HTSUS terms. Carl Zeiss, Inc., 195 F.3d at 1378 n.1. The ENs give catalytic converters as an example of a chemical gas filtration

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<sup>9</sup> Purify, Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/purify> (last visited Jan. 23, 2025).

<sup>10</sup> Filter, Merriam-Webster Dictionary, <https://www.merriam-webster.com/dictionary/filter> (last visited Jan. 23, 2025).

apparatus. See EN 84.21 (II)(B)(4). Catalytic converters perform a catalytic oxidation-reduction reaction, converting harmful hydrocarbons, carbon monoxide and NO<sub>x</sub>, into harmless water, carbon dioxide, nitrogen gas and oxygen. See Emmy Kritsanayiparkporn et al., Catalytic Converters for Vehicle Exhaust: Fundamental Aspects and Technology Overview for Newcomers to the Field, 3 Chemistry 630, 632 (2021).

Similarly, here, the SCR system converts NO<sub>x</sub> into nitrogen and water through a catalytic oxidation-reduction reaction. Pl.’s MSJ at 2. Both catalytic converters, which the ENs give as an example correctly classified under HTSUS heading 8421, and the SCR system at issue here, perform a catalytic oxidation-reduction reaction to purify gas by freeing the gas from harmful substances. The SCR system, however, is not a catalytic converter because there are fundamentally different chemical reactions occurring in the SCR system from those that occur in a catalytic converter.<sup>11</sup> See Def.’s MSJ Ex. 4 at 23. Due to the similarities between a catalytic converter and the SCR system and the common use of the term “purify,” the court classifies the SCR catalyst blocks as a part in the gas purifying SCR system under HTSUS heading 8421.

The court agrees with the government that the SCR catalyst blocks should be classified under heading 8421, HTSUS. The government further contends the SCR catalyst blocks are to be classified under subheading 8421.39.80, HTSUS, because the SCR catalyst blocks function as a gas filtering or purifying apparatus. Def.’s MSJ at 22. The court has a statutory mandate to “reach a correct result.” Jarvis Clark Co., 733 F.2d at 878. As explained above, the court concludes that the SCR catalyst blocks are a part within the larger SCR system rather than an apparatus.

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<sup>11</sup> The predominant chemical reaction in the SCR system facilitated by the SCR catalyst blocks involve ammonia as a necessary reactant. See Pl.’s MSJ at 2. The predominant chemical reaction in a catalytic converter does not involve ammonia as a reactant. See Emmy Kritsanayiparkporn et al., Catalytic Converters for Vehicle Exhaust: Fundamental Aspects and Technology Overview for Newcomers to the Field, 3 Chemistry 630, 632 (2021).

Therefore, the appropriate classification is subheading 8421.99.00, HTSUS – “Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof; parts; other.”

## **II. The SCR Catalyst Blocks Cannot be Classified Under Heading 3815, HTSUS, Plaintiff’s Claimed Classification**

Both parties, at least initially, took a broad view of heading 3815, HTSUS, so that it would cover supported catalysts on a mesh. The language of the 301 exclusions reflects that view. The exclusions cover “[p]late-type supported catalysts . . . applied . . . to a stainless-steel mesh (described in statistical reporting number 3815.19.0000).” 9903.88.01, HTSUS; Exclusion Notice 1; Exclusion Notice 2. The government now contends that the court is not bound by Customs’ previous views, that likely were reflected in the exclusion language, and that heading 3815, HTSUS, is not so broad as to cover supported catalysts extruded onto a mesh. Oral Argument at 37:35–39:00, 43:54–45:15. The court agrees.<sup>12</sup> In order to resolve this matter, however, the court need not reach the issue of what to do with the discrepancy between the description of the product excluded from 301 duties and the HTSUS classification assigned in the exclusions. The court proceeds by accepting arguendo that the 301 exclusion language is consistent with heading 3815, HTSUS, as originally accepted by the parties.

Mitsubishi, for its part, argues the SCR catalyst blocks are prima facie classifiable under heading 3815, HTSUS, because the blocks are described in whole under the heading as

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<sup>12</sup> The language of the heading covers “[r]eaction initiators, reaction accelerators and catalytic preparations, not elsewhere specified or included.” Heading 3815, HTSUS. The EN to heading 3815 explains that it covers “preparations which initiate or accelerate certain chemical processes” and these preparations are often composed “of one or more active substances deposited on a support (known as ‘supported catalysts’).” EN 38.15. The “support” is not the mesh but the chemical support. See Def.’s SMF at ¶ 13. The support generally “consists of alumina, carbon, silica gel, siliceous fossil meal or ceramic materials.” EN 38.15.

“preparations” that perform the functions of initiating and accelerating chemical reactions. Pl.’s Resp. at 23. The government counters that the SCR catalyst blocks are not covered by the plain language of heading 3815, HTSUS. Def.’s Reply at 11. For tariff classifications, an article is to be classified by “the condition in which it is imported.” Rico Import Co. v. United States, 12 F.3d 1088, 1090 (Fed. Cir. 1993) (quoting Worthington v. Robbins, 139 U.S. 337, 341 (1891)). Here, the SCR catalyst blocks were imported fully formed. They were composed of supported catalysts and catalyst plates, but also, a protector, a set of seal bars, and a seal plate. Pl.’s MSJ at 18; Def.’s SMF at ¶¶ 7–8. SCR catalyst blocks are not supported catalyst chemical compounds alone, nor are they supported catalysts on a “medium,” such as a mesh plate. Because, according to the uncontested facts, the SCR catalyst blocks are assemblies of all of these components, they exceed the scope of heading 3815, HTSUS, when interpreted according to the plain meaning of the terms of that heading and, especially, as clarified by EN 38.15. Therefore, they are excluded from heading 3815, HTSUS, by operation of GRI 1, HTSUS.

Further, SCR catalyst blocks cannot be classified under heading 3815, HTSUS, because it includes “not elsewhere specified or included” language. When interpreting if goods are prima facie classifiable under an HTSUS heading such as 3815 that includes the phrase “not elsewhere specified or included,” the court must ensure that two criteria are met: (1) the goods must be described by the heading and (2) the goods must not be elsewhere specified or included in the HTSUS. See R.T. Foods, Inc. v. United States, 36 CIT 1637, 1644, 887 F. Supp. 2d 1351, 1358 (2012). Here, even if the court were to view heading 3815, HTSUS, extremely broadly, the SCR catalyst blocks cannot satisfy the second criteria because the SCR catalyst blocks are included under heading 8421.

**a. The SCR Catalyst Blocks Cannot Be Classified Under Heading 3815, HTSUS, Using GRI 3(b)**

Mitsubishi further argues that because SCR catalyst blocks consist of different components, they are “composite goods” that should be classified by the component which gives them their essential character under GRI 3(b). Pl.’s MSJ at 18. Mitsubishi further explains that SCR supported catalysts “provide the essential functionality (i.e., imparts the essential character)” of the SCR catalyst blocks, and thus, the SCR catalyst blocks are “reaction initiators, reaction accelerators, and catalytic preparations” under heading 3815, HTSUS. Pl.’s MSJ at 18–20. The government counters that Mitsubishi is misapplying the GRIs by skipping to GRI 3 when the SCR catalyst blocks can be classified under heading 8421, HTSUS, using GRI 1. Def.’s MSJ at 24. The government is correct.

GRI 3 applies when “goods are, *prima facie*, classifiable under two or more headings.”

GRI 3, HTSUS. GRI 3(a) requires that:

[t]he heading which provides the most specific description shall be preferred to headings providing a more general description. However, when two or more headings each refer to part only of the materials or substances contained in mixed or composite goods . . . those headings are to be regarded as equally specific in relation to those goods, even if one of them gives a more complete or precise description of the goods.

GRI 3(a). GRI 3(b) requires that “composite goods consisting of different materials or made up of different components . . . shall be classified as if they consisted of the material or component which gives them their essential character.” GRI 3(b). As previously noted, however, the court uses the GRIs in numerical order and only moves to the next GRI if the classification cannot be made by the previous GRI. See Wilton Indus., 741 F.3d at 1266. Because the SCR catalyst blocks are classified under heading 8421, HTSUS, per GRI 1 the court cannot move to GRI 3, as Mitsubishi’s suggested classification requires. Further, even if the court could move beyond GRI



1, the product cannot be classified under any heading other than 8421, so there is no need to consider which heading provides the essential character.

### **III. The Doctrine of Equitable Estoppel Does Not Apply**

Mitsubishi argues that the doctrine of equitable estoppel requires a finding that the Section 301 exclusions apply to the SCR catalyst blocks regardless of their HTSUS heading classification. Pl.'s MSJ at 28; Oral Argument at 31:29. Mitsubishi explains that it specifically sought the exclusions for the subject merchandise that the USTR later granted, and it relied on these granted exclusions to its detriment. Oral Argument at 31:33; see Pl.'s MSJ Ex. 10, 11. Additionally, Mitsubishi argues that the USTR's granting of the exclusions gave Mitsubishi no notice that it would be required to pay duties on the SCR catalyst blocks when imported. Pl.'s Resp. at 40. The government argues that Mitsubishi has not carried its burden of proving equitable estoppel because Mitsubishi has not pointed to any affirmative government misconduct by Customs. Oral Argument at 48:40. The government further asserts that Mitsubishi could have tried to work with the USTR to edit the language of the exclusions if it thought the USTR erred in its drafting. Oral Argument at 39:45, 42:20.

The court concludes that Mitsubishi was on notice that its request was only partially granted and that its products were not covered by the language of the exclusions drafted by the USTR. The USTR's letters to Mitsubishi granting specific exclusions provided a link to its proposed exclusion language and noted:

An exclusion in response to your request has been granted by excluding from the additional tariffs products covered by a specially drafted description contained in the annex to the exclusion notice. The scope of the exclusion is governed by the scope of the 10-digit HTSUS subheadings and product descriptions in the annex to the product exclusion notice, and not by the product descriptions set out in any particular request for exclusion.

Pl.'s MSJ Ex. 10 at 12, Ex. 11 at 12 (emphasis added). When Mitsubishi applied for the exclusions,

it described the subject merchandise but did not provide the USTR with specific language to use in the exclusions. See Pl.’s MSJ Ex. 10, 12. As noted in its letter, the USTR drafted the exclusions in response to Mitsubishi’s request, but the ultimate application of the exclusions to the specific merchandise is governed by the language of the exclusions, not by the description of the merchandise in the exclusion requests. See Notice of Product Exclusions: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 85 Fed. Reg. at 27489-02, 27490; Notice of Product Exclusion Extension: China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation, 85 Fed. Reg. at 48600-01, 48601. Both exclusions issued by the USTR made no mention of the other components of the imported merchandise. The exclusions only mention “[p]late-type supported catalysts . . . applied . . . to a stainless-steel mesh.” Exclusion Notice 1; Exclusion Notice 2. The language of the exclusions comport with the parties’ initial positions that supported catalysts on a mesh plate are classifiable under heading 3815, HTSUS. As indicated, although the court concludes that the description of the product in the exclusions and the noted classification do not agree, it does not change the outcome of this case. Supported catalysts on a mesh plate may be excluded from 301 duties, but the product at issue is more than that. It is an entire assembly of various parts of which the mesh plates are only one component. Nothing occurred here that is inconsistent with the exclusions granted. The government did not mislead plaintiff.

### CONCLUSION

For the foregoing reasons, the court denies both Mitsubishi’s motion for summary judgment and the government’s cross-motion for summary judgment. The subject merchandise is properly classified under subheading 8421.99.00 and secondary heading 9903.88.01, HTSUS. Judgment will be entered accordingly.

/s/ Jane A. Restani  
Jane A. Restani, Judge

Dated: April 29, 2025  
New York, New York