Slip Op. 10-72

APPLIED BIOSYSTEMS (A DIVISION OF APPLERA CORPORATION),	•		
Plaintiff,	:	D (
v.	: :	Before: Court No.:	WALLACH, Judge 03-00251
UNITED STATES,	:	PUBLIC VERSION	
Defendant.	• : •		

UNITED STATES COURT OF INTERNATIONAL TRADE

[Defendant's Motion for Summary Judgment is GRANTED, and Plaintiff's Motion for Denial of Defendant's Motion for Summary Judgment and to Fix a Date and Place for Trial is DENIED.]

Dated: June 28, 2010

Rodriguez, O'Donnell, Gonzalez and Williams, P.C. (Thomas J. O'Donnell, Michael A. Johnson, and Laura A. Austrins) for Plaintiff Applied Biosystems (A Division of Applera Corporation).

<u>Tony West</u>, Assistant Attorney General; <u>Barbara S. Williams</u>, Attorney-in-Charge, International Trade Field Office, Commercial Litigation Branch, Civil Division, U.S. Department of Justice (<u>Amy M. Rubin</u>); and <u>Yelena Slepak</u>, Office of the Assistant Chief Counsel, International Trade Litigation, U.S. Customs and Border Protection, Of Counsel, for Defendant United States.

OPINION

Wallach, Judge:

I INTRODUCTION

This action involves classification under the Harmonized Tariff Schedule of the United

States ("HTSUS") of certain thermal cyclers and thermal cycler parts. U.S. Customs and Border

Protection ("Customs") classified these goods under HTSUS Heading 8419, which includes

"machinery, plant or laboratory equipment . . . for the treatment of materials by a process

involving a change of temperature" as well as "parts thereof." Plaintiff Applied Biosystems (A Division of Applera Corporation) ("Plaintiff") argues that these goods should instead be classified under HTSUS Heading 9032, which includes "[a]utomatic regulating or controlling instruments and apparatus" as well as "parts and accessories thereof."¹

The court has jurisdiction under 28 U.S.C. § 1581(a). Defendant United States ("Defendant") seeks summary judgment in its favor. <u>See</u> Defendant's Motion for Summary Judgment ("Defendant's Motion"). Plaintiff opposes summary judgment and seeks trial. <u>See</u> Plaintiff's Motion for Denial of Defendant's Motion for Summary Judgment and to Fix a Date and Place for Trial ("Plaintiff's Motion").² The parties have stipulated that the thermal cycler parts at issue are of a kind that should be classified under the same HTSUS heading as the thermal cyclers. <u>See infra</u> Part IV.C.

Defendant's Motion is GRANTED, and Plaintiff's Motion is DENIED. HTSUS Heading 8419 accurately describes the function of a thermal cycler, namely "treatment of materials by a process involving a change of temperature." In contrast, HTSUS Heading 9032 describes only those elements of a thermal cycler that regulate heating and cooling and does not describe those elements that actually heat and cool.

¹ Part II.A, <u>infra</u>, identifies the precise subheadings at issue.

 $^{^{2}}$ The court commends both parties on the quality of their briefs and on the cooperation they have demonstrated.

II BACKGROUND

A Procedural History

This action covers certain thermal cyclers and thermal cycler parts imported by Plaintiff between March 2000 and July 2002. See Summons.³ Customs classified the thermal cyclers under HTSUS Subheadings 8419.89.90 (2000-2001) and 8419.89.95 (2002) and assessed duties at some rate between 4.2 percent <u>ad valorem</u> and 4.7 percent <u>ad valorem</u>. See <u>id.</u>; Complaint ¶ 11; Answer to Complaint ("Answer") ¶ 11.⁴ It classified the parts under HTSUS Subheadings 8419.90.80 (2000-2001) and 8419.90.95 (2002) and assessed duties at the 4 percent <u>ad valorem</u> rate applicable to these subheadings. See Complaint ¶ 12; Answer ¶ 12.⁵

In nine protests that were timely as to the 162 entries that remain part of this action, Plaintiff asked Customs to reclassify the thermal cyclers under HTSUS Subheading 9032.89.60 (2000-2002) and the parts under HTSUS Subheading 9032.90.60 (2000-2002). See Summons; Plaintiff's Response to Defendant's Statement of Material Facts As to Which There Are No Genuine Issues to Be Tried ("Plaintiff's Response to Defendant's Fact Statement") $\P 2.^6$ The duty rate applicable to these subheadings is 1.7 percent <u>ad valorem</u>. See HTSUS Subheading 9032.89.60 (2000-2002); HTSUS Subheading 9032.90.60 (2000-2002).

³ These thermal cyclers are marketed as GeneAmp® PCR Systems 2400, 2700, 9600, and 9700. <u>See</u> Plaintiff's Response to Defendant's Statement of Material Facts As to Which There Are No Genuine Issues to Be Tried ("Plaintiff's Response to Defendant's Fact Statement") ¶ 7. Plaintiff does not challenge the classification of the thermal cyclers marketed as GeneAmp® Insitu PCR 1000. <u>See id.</u>

⁴ The 2002 edition of HTSUS renumbered to 8419.89.95 what had been Subheading 8419.89.90 in the 2000-2001 editions. <u>See</u> Answer ¶ 11. Although the duty rate applicable to these subheadings is 4.2 percent <u>ad</u> <u>valorem</u>, this rate is identified in the Complaint as 4.5 percent <u>ad valorem</u> and in the Summons as 4.7 percent <u>ad</u> <u>valorem</u>. <u>See</u> HTSUS Subheading 8419.89.90 (2000-2001); HTSUS Subheading 8419.89.95 (2002); Complaint ¶ 11; Summons.

 $^{^5}$ The 2002 edition of HTSUS renumbered to 8419.90.95 what had been Subheading 8419.90.80 in the 2000-2001 editions. See Answer ¶ 12.

⁶ In some of the protests, Plaintiff may have sought classification of the thermal cyclers and parts under subheadings other than HTSUS Subheadings 9032.89.60 and 9032.90.60 (2000-2002). <u>See</u> Summons.

After Customs denied those protests, Plaintiff initiated the instant action. <u>See</u> Summons. The court designated this action as a test case and suspended under it nine additional actions initiated by Plaintiff. <u>See</u> June 1, 2005 Order. Defendant then moved for summary judgment in its favor, <u>see</u> Defendant's Motion, and Plaintiff moved for denial of Defendant's Motion and "to set a date and place for the trial of this action," Plaintiff's Motion at 1.

B Description Of The Imported Goods⁷

A thermal cycler is an apparatus for "controlled automated performance of polymerase chain reactions." U.S. Patent No. 5,475,610 (December 12, 1995) at 243 ¶ 1, <u>cited in</u> Plaintiff's Statement of Material Facts Supplemental to Defendant's Statement of Material Facts ("Plaintiff's Fact Statement") ¶ 37.⁸ A polymerase chain reaction ("PCR") amplifies—that is, massively replicates—certain deoxyribonucleic acid ("DNA") sequences over multiple cycles. See Plaintiff's Fact Statement ¶ 10. These reactions occur in a liquid mixture comprising the subject DNA, primers, an enzyme known as DNA polymerase, nucleotide precursors, and a buffer solution. See id. ¶ 21. In the first step (denaturation), the mixture is initially heated (typically to 94°C) so that the single strands of each DNA double helix unwind. See id. ¶ 22. In the second step (annealing), the mixture is then rapidly cooled so that a primer binds to the target segment of each strand. See id. In the third step (synthesis), the mixture is again heated

⁷ Plaintiff's Statement of Material Facts Supplemental to Defendant's Statement of Material Facts ("Plaintiff's Fact Statement") is a source for some of the facts in this Part II.B. For the purpose of deciding Defendant's Motion, Defendant accepts as true those portions of Plaintiff's Fact Statement that are cited in this Opinion. <u>See</u> Defendant's Reply to Plaintiff's Response to Defendant's Motion for Summary Judgment ("Defendant's Reply") at 4; see also infra Part IV.A.

⁸ Thermal cyclers are also referred to as, <u>inter alia</u>, "PCR systems," "PCR machines," "PCR instruments," and "thermocyclers." <u>See, e.g.</u>, Complaint ¶ 5; Headquarters Ruling No. 965366 (September 24, 2002) ("HQ 965366") at 1; Defendant's Statement of Material Facts As to Which There Are No Genuine Issues to Be Tried ("Defendant's Fact Statement") ¶ 5; Plaintiff's Fact Statement ¶¶ 6, 36. This Opinion adopts the general term used by Plaintiff on its website. <u>See</u> Applied Biosystems, Thermal Cyclers,

http://www.appliedbiosystems.com/absite/us/en/home/applications-technologies/pcr/thermal-cyclers.html.

(typically to 72°C) so that the DNA polymerase forms a new complementary DNA segment for each target segment. See id. These three steps are repeated for each cycle. See id. $\P 23$.⁹ If the subject DNA contains the target segment and each reaction is perfect, then 20 cycles will produce more than a million copies of each such segment and 30 cycles will produce more than a billion copies. See id. $\P 28$.

As its name suggests, a thermal cycler automates this thermal cycling. See id. \P 42. The apparatus fits on a countertop and has four pertinent elements:

1) A sample block into which tubes containing the reaction mixture are inserted;

2) A means of heating and cooling the sample block;

3) Sensors that measure the temperature of the sample block; and

4) A computer that calculates temperatures and directs the heating and cooling.

<u>See</u> U.S. Patent No. 5,475,610 at 243 ¶ 1; Plaintiff's Fact Statement ¶¶ 45, 66, 86-92, 95, 108,

112-13; Exhibits 2-7, Deposition of Douglas Grunewald (April 30, 2009) Confidential Exs. 2-6,

Annex E, Plaintiff's Motion; see also U.S. Patent No. 5,038,852 (August 13, 1991) at 38 ¶ 1;

U.S. Patent No. 5,333,675 (August 2, 1994) at 60-61 ¶ 1; U.S. Patent No. 5,656,493 (August 12,

1997) at 55-56 ¶¶ 1-4; U.S. Patent No. 7,133,726 B1 (November 7, 2006) at 14 ¶ 1. The thermal cyclers at issue in the instant action incorporate either solid state thermoelectric devices for both heating and cooling or a combination of resistance heaters for heating and chillers for cooling.

See Plaintiff's Fact Statement ¶¶ 95, 108, 112-13.

⁹ "[S]ome more recent protocols" combine the second and third steps. Plaintiff's Fact Statement ¶ 29.

III STANDARD OF REVIEW

In a classification case, "the court construes the relevant (competing) classification headings, a question of law; determines what the merchandise at issue is, a question of fact; and then" determines "the proper classification under which [the merchandise] falls, the ultimate question in every classification case and one that has always been treated as a question of law." Bausch & Lomb, Inc. v. United States, 148 F.3d 1363, 1366 (Fed. Cir. 1998).

The court will grant a motion for summary judgment "if the pleadings, discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." USCIT R. 56(c); <u>see Anderson v. Liberty Lobby, Inc.</u>, 477 U.S. 242, 247-48, 106 S. Ct. 2505, 91 L. Ed. 2d 202 (1986). Accordingly, summary judgment in a classification case is appropriate only if "the material facts of what the merchandise is and what it does are not at issue." <u>Diachem Indus. Ltd.</u> <u>v. United States</u>, 22 CIT 889, 892 (1998) (citation omitted).

The court determines the proper classification <u>de novo</u> by applying the HTSUS General Rules of Interpretation ("GRIs") and the HTSUS Additional U.S. Rules of Interpretation ("ARIs") in numerical order. <u>See Faus Group, Inc. v. United States</u>, 581 F.3d 1369, 1372 (Fed. Cir. 2009); <u>Carl Zeiss, Inc. v. United States</u>, 195 F.3d 1375, 1379 (Fed. Cir. 1999); <u>Rollerblade</u>, <u>Inc. v. United States</u>, 112 F.3d 481, 483-84 (Fed. Cir. 1997).¹⁰ GRI 1 provides in relevant part that "classification shall be determined according to the terms of the [HTSUS] headings and any

¹⁰ Classification decisions made by Customs may be entitled to some weight in accordance with <u>Skidmore</u> <u>v. Swift & Co.</u>, 323 U.S. 134, 65 S. Ct. 161, 89 L. Ed. 124 (1944). <u>See United States v. Mead Corp.</u>, 533 U.S. 218, 234-35, 121 S. Ct. 2164, 150 L. Ed. 2d 292 (2001); <u>Michael Simon Design, Inc. v. United States</u>, 30 CIT 1160, 1163, 452 F. Supp. 2d 1316 (2006). In the instant action, the court independently agrees with Customs as to the proper classification of the thermal cyclers at issue. <u>See infra</u> Part IV.B. Therefore, the court need not determine what weight to accord to HQ 965366, in which Customs explains the rationale for its classification of certain thermal cycler parts that belong to entries that are not part of this action.

relative section or chapter notes." GRI 1 (2000-2002).¹¹ "Absent contrary legislative intent, HTSUS terms are to be construed according to their common and commercial meanings, which are presumed to be the same." <u>Carl Zeiss</u>, 195 F.3d at 1379 (citing <u>Simod Am. Corp. v. United</u> <u>States</u>, 872 F.2d 1572, 1576 (Fed. Cir. 1989)).

"To assist it in ascertaining the common meaning of a tariff term, the court may rely on its own understanding of the terms used and may consult lexicographic and scientific authorities, dictionaries, and other reliable information sources." <u>Baxter Healthcare Corp. v. United States</u>, 182 F.3d 1333, 1337-38 (Fed. Cir. 1999) (citation omitted). Although not dispositive, the Explanatory Notes maintained by the Harmonized System Committee of the World Customs Organization do "clarify the scope of the HTSUS subheadings and offer guidance in their interpretation." <u>Franklin v. United States</u>, 289 F.3d 753, 758 (Fed. Cir. 2002) (citation omitted); <u>see</u> H.R. Conf. Rep. No. 100-576, 100th Cong., 2d Sess. 549 (1988) at 26-27, <u>reprinted in</u> 1988 U.S.C.C.A.N. 1547, 1582.

IV DISCUSSION

Jurisdiction is available under 28 U.S.C. § 1581(a). <u>See</u> 28 U.S.C. § 1581(a); June 14, 2005 Joint Statement of Jurisdiction. There is no genuine issue as to any material fact concerning the thermal cyclers. <u>See infra</u> Part IV.A. Customs properly classified the thermal cyclers under HTSUS Heading 8419. <u>See infra</u> Part IV.B. The thermal cyclers are completely described by this heading, <u>see infra</u> Part IV.B.1, but incompletely described by the competing HTSUS Heading 9032, <u>see infra</u> Part IV.B.2. Defendant's Motion does not address the thermal cycler parts that are also included in this action. <u>See infra</u> Part IV.C.

¹¹ Because the goods at issue in this action can be classified pursuant to GRI 1 alone, the subordinate GRIs and ARIs are not described. <u>See infra</u> Part IV.B.

Α

There Is No Genuine Issue As To Any Material Fact Concerning The Thermal Cyclers

Although Plaintiff and Defendant disagree on the proper classification of the thermal cyclers at issue, they do not disagree materially on the nature of these goods. Defendant has accepted certain factual corrections related to jurisdiction that Plaintiff provided to Defendant's Statement of Material Facts As to Which There Are No Genuine Issues to Be Tried ("Defendant's Fact Statement"). <u>See</u> Defendant's Reply to Plaintiff's Response to Defendant's Motion for Summary Judgment ("Defendant's Reply") at 1; Plaintiff's Response to Defendant's Fact Statement ¶¶ 1-4, 6-7. As Defendant notes, "while [Plaintiff] takes issue with the scope, precision, tone or phrasing of some" of the nonjurisdictional statements contained in Defendant's Fact Statement, Plaintiff "does not actually deny any of them." Defendant's Reply at 1-2; <u>see</u> Plaintiff's Response to Defendant's Motion, Defendant has accepted as true all but two of the statements in Plaintiff's Fact Statement. <u>See</u> Defendant's Reply at 4. These two disagreements are immaterial, as Defendant "still agree[s] with [Plaintiff's] description of the PCR process and how the goods function." <u>Id.</u> at 5.

B Customs Properly Classified The Thermal Cyclers Under HTSUS Heading 8419 1

HTSUS Heading 8419 Completely Describes A Thermal Cycler

HTSUS Heading 8419 (2000-2001) provides in relevant part:

8419 Machinery, plant or laboratory equipment, whether or not electrically heated, for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing, steaming, drying, evaporating, vaporizing, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, nonelectric; parts thereof:

8419.89	Other:
8419.89.90	Other

HTSUS Heading 8419 (2000-2001).

. . .

Similarly, HTSUS Heading 8419 (2002) provides in relevant part:

8419 Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing, steaming, drying, evaporating, vaporizing, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, nonelectric; parts thereof:

8419.89Other:8419.89.95Other

HTSUS Heading 8419 (2002).¹²

. . .

The section that includes HTSUS Heading 8419 "does not cover . . . [a]rticles of chapter 90." HTSUS Section XVI Note 1(m). However, "[w]here a machine . . . consists of individual components . . . intended to contribute together to a clearly defined function covered by one of the headings in chapter 84 or chapter 85, then the whole falls to be classified in the heading appropriate to that function." HTSUS Section XVI Note 4.

A thermal cycler qualifies as both "machinery" and "laboratory equipment." "Machinery" means "machines as a functioning unit." Webster's Third New International Dictionary (2002). A "machine" is, <u>inter alia</u>, "an assemblage of parts that are usu[ally] solid bodies but include in some cases fluid bodies or electricity in conductors and that transmit forces,

¹² There are two changes from the quoted portion of HTSUS Heading 8419 (2000-2001) to the quoted portion of HTSUS 8419 (2002): The addition of "(excluding furnaces, ovens and other equipment of heading 8514)" and the renumbering of subheading 8419.89.90 to 8419.89.95. Neither change affects the relevant substantive analysis.

motion, and energy one to another in some predetermined manner and to some desired end." <u>Id.</u> A "laboratory" is "a place devoted to experimental study in any branch of natural science or to the application of scientific principles in testing and analysis or in the preparation usu[ally] on a small scale of drugs, chemical, explosives, or other products or substances." <u>Id.</u> "Equipment" refers to "the implements (as machinery or tools) used in an operation or activity." <u>Id.</u>

The task, operation, or activity performed by a thermal cycler is "the treatment of materials by a process involving a change of temperature," HTSUS Heading 8419 (2000-2002). The PCR method of amplification described by Plaintiff necessarily involves temperature change. See supra Part II.B. More specifically, denaturation of the DNA involves heating, annealing of the primers to their complementary DNA segments involves cooling, and synthesis of the new strands may involve reheating. See id.

A thermal cycler effects these precise temperature changes. <u>See id.</u> It does nothing more. <u>See id.</u> Plaintiff has not suggested, and it is not reasonable to infer, that a thermal cycler as imported contains any of the reagents necessary for a PCR to occur. <u>See</u> Complaint; Plaintiff's Memorandum in Opposition to Defendant's Motion for Summary Judgment and in Support of Plaintiff's Motion to Deny Defendant's Motion and Set a Date for Trial ("Plaintiff's Memo"). A thermal cycler does not add these reagents to the reaction mixture, it does not stir that mixture, and it does not analyze that mixture for any purpose other than achieving and verifying the target temperature. <u>See supra Part II.B</u>; Plaintiff's Fact Statement. Indeed, if an efficient PCR could occur regardless of temperature, a thermal cycler would have no utility other than as an overly complex receptacle for sample tubes.¹³

The specialized nature of a thermal cycler does not preclude its classification under

HTSUS Heading 8419. The language of this heading includes examples of specialized

processes, "such as . . . distilling, rectifying, sterilizing, [and] pasteurizing." HTSUS Heading

8419 (2000-20002). The Explanatory Notes also support such a classification:

Machinery and apparatus of a kind covered by [Chapters 84 and 85] remain classified in the Section <u>even if specialised</u> for use in laboratories or in connection with scientific and measuring instruments, provided they do not constitute nonindustrial demonstrational apparatus of heading 90.23 nor measuring, checking, etc., instruments of Chapter 90. For example, small furnaces, distillation apparatus, grinders, mixers, electrical transformers and capacitors, for use in laboratories, remain classified in this Section.

Explanatory Note IV to Section XVI (unchanged from 2000-2002) (emphasis modified). Moreover:

[Heading 8419] further includes <u>specially designed laboratory apparatus</u> and equipment, generally small in size (autoclaves, distilling, sterilising or steaming apparatus, dryers, etc.), but it excludes demonstrational apparatus of heading 90.23, and measuring, checking, etc., apparatus more specifically covered by Chapter 90.

Explanatory Note VII to Heading 84.19 (unchanged from 2000-2002) (emphasis modified). A

thermal cycler qualifies as "specially designed laboratory apparatus and equipment," id.

(emphasis omitted), for "the treatment of materials by a process involving a change of

temperature," HTSUS Heading 8419 (2000-2002). As discussed below, a thermal cycler is

neither "more specifically covered by" nor an "[a]rticle[] of" HTSUS Heading 9032.

¹³ Plaintiff argues that "the heating and cooling referred to must, in and of themselves, constitute the treatment of the materials" and that "the purpose of the PCR process . . . is not to obtain DNA or nucleotides in a heated or cooled state." Plaintiff's Memo at 25. This argument is unpersuasive for two reasons. First, by the very language of the heading, the list of processes "<u>such as heating [or] cooking</u>" is not exhaustive. HTSUS Heading 8419 (2000-2002) (emphasis added). Second, the purpose of heating is to obtain DNA at a temperature at which it is susceptible to denaturation, and the purpose of cooling is to obtain DNA and primers at a temperature at which they are susceptible to annealing. <u>See supra</u> Part II.B.

Explanatory Note VII to Heading 84.19 (unchanged from 2000-2002); HTSUS Section XVI Note 1(m); see infra Part IV.B.2.¹⁴ Accordingly, HTSUS Heading 8419 accurately and completely describes a thermal cycler.

2 HTSUS Heading 9032 Incompletely Describes A Thermal Cycler

HTSUS Heading 9032 (2000-2002) provides in relevant part:

9032	Automatic regulating or controlling instruments and apparatus; parts and accessories thereof:
	Other instruments and apparatus:
9032.89	Other:
 9032.89.60	Other

HTSUS Heading 9032 (2000-2002). This heading "applies only to:"

(a) Instruments and apparatus for automatically controlling the flow, level, pressure or other variables of liquids or gases, or for automatically controlling temperature . . . ; and

(b) Automatic regulators of electrical quantities, and instruments or apparatus for automatically controlling non-electrical quantities the operation of which depends on an electrical phenomenon varying according to the factor to be controlled.

HTSUS Chapter 90 Note 6 (2000-2001).¹⁵ Included among the subheadings are thermostats,

manostats, "[i]ndustrial process control instruments and apparatus," automatic voltage regulators,

"[c]ontrol instruments for air conditioning, refrigeration or heating systems," and other

"[p]rocess control instruments and apparatus." HTSUS Heading 9032 (2000-2002).

¹⁴ In this action, Plaintiff does not argue that a thermal cycler is classifiable under any heading of Chapter 90 other than HTSUS Heading 9032. <u>See</u> Complaint; Plaintiff's Memo.

¹⁵ The 2002 edition further describes the instruments and apparatus of part (a) as "designed to bring this factor to, and maintain it at, a desired value, stabilized against disturbances, by constantly or periodically measuring its actual value." HTSUS Chapter 90 Note 7 (2002).

The field of control systems encompasses the terms "automatic control" and "automatic regulation" as well as the specific instruments included among the subheadings. <u>See</u> McGraw-Hill Dictionary of Scientific and Technical Terms, Sixth Ed. (2002) ("McGraw-Hill Scientific Dictionary") at xi (defining "control systems"); Van Nostrand's Scientific Encyclopedia, Ninth Ed. (2002) Vol. 1 at 935-38 (explaining "control system"). Automatic controllers and regulators "continuously measure[] the value of a variable quantity or condition and then automatically act[] on the controlled equipment to correct any deviation from a desired preset value." McGraw-Hill Scientific Dictionary at 169 (defining "automatic controller"), 171 (defining "automatic regulator"); <u>see also</u> Van Nostrand's Scientific Encyclopedia, Ninth Ed. (2002) Vol. 1 at 934-38 (explaining "control system").

Controllers are therefore conceptually distinct from the equipment that they control. For example, a thermostat controls, but does not encompass, the mechanical equipment that actually heats or cools. <u>See McGraw-Hill Scientific Dictionary</u> (defining "thermostat" as "[a]n instrument which measures changes in temperatures and directly or indirectly controls sources of heating and cooling to maintain a desired temperature").

The Explanatory Notes support the conclusion that HTSUS Heading 9032 refers to the apparatus that determines and issues directions but not to the complementary apparatus that actually carries out those directions:

Automatic control apparatus for liquids or gases and apparatus for automatically controlling temperature form part of complete automatic control systems and consist essentially of the following devices:

- (A) A device for measuring the variable to be controlled (pressure or level in a tank, temperature in a room, etc.)...
- (B) A control device which compares the measured value with the desired value and actuates the device described in (C) below accordingly.
- (C) A starting, stopping or operating device....

[Such] [i]nstruments and apparatus . . . are connected to an appliance which carries out the orders (pump, compressor, valve, furnace burner, etc.) which restores the variable (e.g., liquid measured in a tank or temperature measured in a room) to the prescribed value, or which, in the case of a safety system, for instance, stops the operation of the machine or apparatus controlled. This appliance, generally remote controlled by a mechanical, hydraulic, pneumatic or electric control, is to be classified in its own appropriate heading If the automatic control apparatus is combined with the appliance which carries out the orders, the classification of the whole is to be determined under either Interpretative Rule 1 or Interpretative Rule 3 (b)

Explanatory Note 90.32(I) (unchanged from 2000 to 2002) (emphasis modified).¹⁶

A thermal cycler combines "the automatic control apparatus . . . with the appliance which carries out the orders." <u>Id.</u> The automatic controller includes the sensors that measure the temperature of the sample block and the computer that calculates temperatures and directs the heating and cooling. <u>See supra</u> Part II.B. The controlled equipment includes the sample block into which tubes containing the reaction mixture are inserted and the means of heating and cooling that sample block. <u>See id.</u>

By its terms, HTSUS Heading 9032 describes the elements of a thermal cycler that direct heating and cooling but does not describe the elements that actually heat and cool. This heading therefore provides an incomplete description of a thermal cycler under GRI 1. Conversely, HTSUS Heading 8419 provides a complete description of a thermal cycler under GRI 1. <u>See supra</u> Part IV.B.1.

Accordingly, recourse to GRI 3(b) or to any other GRI or ARI is neither necessary nor proper. <u>See</u> GRI 1; HTSUS Section XVI Note 4; <u>cf. Wagner Spray Tech Corp. v. United States</u>, 31 CIT 676, 681-84, 493 F. Supp. 2d 1265 (2007) (rejecting a classification that incompletely described the goods at issue in favor of a classification that completely described those goods). Customs properly classified the thermal cyclers under HTSUS Heading 8419.

¹⁶ Interpretive Rules 1 and 3(b) are equivalent to GRIs 1 and 3(b).

С

The Parties Have Stipulated To The Nature Of The Thermal Cycler Parts

This action also includes certain thermal cycler parts imported by Plaintiff. <u>See</u> Complaint ¶¶ 5, 12, 15-16; Plaintiff's Response to Defendant's Fact Statement ¶ 6. Defendant's Motion does not address these parts. <u>See</u> Defendant's Fact Statement ¶ 6; Defendant's Memorandum in Support of Its Motion for Summary Judgment at 1 n.1; Defendant's Reply at 3 ("This case involves a single question – the proper classification of thermal cyclers."). However, the parties stipulated at oral argument that these parts are of a kind that should be classified under the same HTSUS heading as the thermal cyclers. <u>See</u> June 22, 2010 Oral Argument at 00:5:20-30 (Defendant: "I think we can actually stipulate that whatever parts are at issue should follow the classification of the machines."), 00:05:30-35 (Plaintiff: "We do stipulate that."). Accordingly, because Customs properly classified the thermal cyclers under HTSUS Heading 8419, it properly classified the thermal cycler parts under this heading as well.¹⁷

V CONCLUSION

For the reasons stated above, Defendant's Motion is GRANTED, Plaintiff's Motion is DENIED, and the classification by Customs of the thermal cyclers and thermal cycler parts is AFFIRMED.

__/s/ Evan J. Wallach____ Evan J. Wallach, Judge

Dated: June 28, 2010 New York, New York

¹⁷ Of course, this stipulation of fact does not affect Plaintiff's right of appeal in this action.