Slip Op. 23-24

UNITED STATES COURT OF INTERNATIONAL TRADE

CYBER POWER SYSTEMS (USA) INC.,

Plaintiff,

v.

UNITED STATES,

Defendant.

Before: Leo M. Gordon, Judge

Court No. 20-00124

**OPINION**

[Following trial on the issue of substantial transformation for purposes of determining country of origin under 19 U.S.C. § 1304(a), judgment for Plaintiff as to the origin of one model of subject merchandise, and judgment for Defendant as to the remaining five.]

Dated: February 27, 2023

John M. Peterson, Richard F. O'Neill, and Patrick B. Klein, Neville Peterson LLP, of New York, N.Y., for Plaintiff Cyber Power Systems (USA) Inc.

Luke Mathers, Trial Attorney, and Beverly A. Farrell, Senior Trial Attorney, Commercial Litigation Branch, Civil Division, U.S. Department of Justice, of New York, N.Y., argued for Defendant United States. With them on the brief were Brian M. Boynton, Principal Deputy Assistant Attorney General, Patricia M. McCarthy, Director, and Justin R. Miller, Attorney-in-Charge. Of counsel was Yelena Slepak, Attorney, Office of the Assistant Chief Counsel, International Trade Litigation, U.S. Customs and Border Protection, of New York, N.Y.

Gordon, Judge: Plaintiff Cyber Power Systems (USA) Inc. ("Cyber Power") commenced this action contesting a denied protest regarding the country of origin marking of five models of uninterruptible power supplies ("UPS") and one model of surge voltage protectors ("SVP"). Upon entry of the subject merchandise, which Plaintiff had marked as "Made in the Philippines," U.S. Customs and Border Protection ("Customs")

determined that the country of origin for the five UPSs and one SVP was China and excluded their entry when Cyber Power refused to change its markings. Cyber Power contended before Customs, and now before the court, that its operations in the Philippines, conducted by Cyber Power Systems Manufacturing, Inc. ("Cyber Power Philippines"), resulted in a "substantial transformation" of the merchandise into Philippine origin, having a name, character, and use different from each device's Chinese components.

The court has jurisdiction pursuant to 28 U.S.C. § 1581(a) (2018). The court presumes familiarity with its prior opinions in this action. See Cyber Power Sys. (USA) Inc. v. United States, 44 CIT ___, ___, 471 F. Supp. 3d 1371 (2020); Cyber Power Sys. (USA) Inc. v. United States, 46 CIT ___, ___, 560 F. Supp. 3d 1347 (2022). For the reasons that follow, the court enters judgment for Plaintiff as to the Philippine origin of one model of subject merchandise, UPS Model No. CP600LCDa, and judgment for Defendant as to the Chinese origin of the remaining five models.

## I. Standard of Review and Legal Framework

### A. Standard of Review

The court reviews Customs' protest decisions de novo. 28 U.S.C. § 2640(a)(1) (2018). For contested factual issues, a statutory presumption of correctness imposes the burden of proof on Plaintiff. See id. § 2639(a)(1); Universal Elecs., Inc. v. United States, 112 F.3d 488, 492 n.2 (Fed. Cir. 1997); Chrysler Corp. v. United States, 33 CIT 90, 97, 601 F. Supp. 2d 1347, 1353–54 (2009), aff'd, 592 F.3d 1330 (Fed. Cir. 2010). Despite its name, the statutory presumption of correctness is not a true evidentiary

presumption governed by Federal Rule of Evidence 301, but rather an "assumption" that allocates to Plaintiff the burden of proof on contested factual issues that arise from the protest decision. Universal Elecs., 112 F.3d at 492 n.2; 21B Charles A. Wright & Kenneth W. Graham, Jr., Fed. Prac. & Proc. Evid. § 5124 (2d ed. 2022) ("Rule 301 does not apply to 'assumptions'—rules for allocating the burden of proof that are often mislabeled as 'presumptions.' . . . [T]he best known include: . . . the 'assumption' that official duty has been regularly performed." (footnotes omitted)). Plaintiff's burden of proof carries an initial burden of production (to make an evidentiary proffer), and an ultimate burden of persuasion to establish the operative facts by a preponderance of the evidence. Universal Elecs., 112 F.3d at 492.

**B. The Marking Statute (19 U.S.C. § 1304(a))**

Section 304(a) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1304(a),[1] requires that all merchandise imported into the United States be marked permanently, legibly, indelibly, and in a conspicuous place, to indicate to the ultimate purchaser the English name of the product's country of origin. The implementing regulation, 19 C.F.R. § 134.1(b), defines the term "country of origin" as "the country of manufacture, production, or growth of any article of foreign origin entering the United States." Section 134.1(b) explains that "[f]urther work or material added to an article in another country must effect a substantial transformation in order to render such other country the 'country of origin' within the meaning of this part." 19 C.F.R. § 134.1(b) (emphasis added). Simply stated,

[1] Further citations to the Tariff Act of 1930, as amended, are to the relevant provisions of Title 19 of the U.S. Code, 2018 edition.

imported merchandise originates for marking purposes in the last country in which it underwent a "substantial transformation" prior to importation into the United States. Merchandise not marked with the proper country of origin may be excluded by Customs from entry into the United States. See 19 U.S.C. § 1304(j); see also 19 C.F.R. § 134.3(a).[2]

**C. Substantial Transformation**

Plaintiff must establish by a preponderance of the evidence that its subject merchandise is substantially transformed in the country it wishes to represent as the merchandise's country of origin. See 28 U.S.C. § 2639(a)(1); Universal Elecs., 112 F.3d at 492 (plaintiff bears burden of proof on contested factual issues arising from underlying protest decision).

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[2] Additionally, effective July 6, 2018, the Office of the United States Trade Representative imposed an additional tariff—twenty-five percent ad valorem—on certain products from China, including those in issue in this action, that are classified in the subheadings enumerated in Section XXII, Chapter 99, Subchapter III U.S. Note 20(b), Harmonized Tariff Schedule of the United States.

In ruling on cross-motions for summary judgment, the court articulated the purpose of the Section 301 tariffs:

> [T]he purpose of the imposition of the Section 301 tariffs was to promote a change in the "government of China's acts, policies and practices related to technology transfer, intellectual property and innovation." . . . Additionally, the Section 301 tariffs were intended to encourage a partial de-coupling of China's economy from that of the United States, by discouraging investment in, and trade with, China.

Cyber Power, 46 CIT at ___, 560 F. Supp. 3d at 1352 (citations omitted). It is evident to the court that Cyber Power was engaging in that decoupling process. However, the mere fact that Cyber Power was attempting to meet the policy objective does not overcome its inability to demonstrate that five of the six devices were substantially transformed in the Philippines.

A substantial transformation occurs "when an article emerges from a manufacturing process with a name, character, or use which differs from those of the original material subjected to the process." Torrington, Co. v. United States, 764 F.2d 1563, 1568 (Fed. Cir. 1985) (citing Tex. Instruments, Inc. v. United States, 681 F.2d 778, 782 (C.C.P.A. 1982)); see also United States v. Gibson-Thomsen Co., 27 C.C.P.A. 267, 273 (1940) (clarifying that marking statute did not "require that an imported article, which is to be used in the United States as material in the manufacture of a new article having a new name, character, and use, and which, when so used, becomes an integral part of the new article, be so marked as to indicate to the retail purchaser of the new article that such imported article or material was produced in a foreign country"). Substantial transformation is fact-specific and determined on a case-by-case basis. See Belcrest Linens v. United States, 741 F.2d 1368, 1373 (Fed. Cir. 1984).

While the test is expressed in the disjunctive, courts consider all three factors, and have generally found a change in name to be "the weakest evidence of substantial transformation." See, e.g., Koru N. Am. v. United States, 12 CIT 1120, 1126, 701 F. Supp. 229, 234 (1988) (quoting Nat'l Juice Prods. Ass'n v. United States, 10 CIT 48, 59, 628 F. Supp. 978, 989 (1986)). Indeed, a finding of substantial transformation frequently rests on multiple factors because a change in character often results in a change in use, and a change in character or use generally necessitates a change in name. See id. 12 CIT at 1127, 701 F. Supp. at 235 ("The fish's name has been changed as the result of the processing method which occurred in Korea. . . . The fish's character, after its journey through Korea, is also vastly different.'" (internal citations omitted));

see also Belcrest Linens, 741 F.2d at 1374 ("[T]he identity of the merchandise changed as did its character and use: embroidered fabric was transformed into pillowcases which are clearly distinguishable in character and use from the fabric of which they were made."); Ferrostaal Metals Corp. v. United States, 11 CIT 470, 478, 664 F. Supp. 535, 541 (1987) ("Based on the totality of the evidence, showing that the continuous hot-dip galvanizing process effects changes in the name, character and use of the processed steel sheet, the Court holds that the changes constitute a substantial transformation and that hot-dipped galvanized steel sheet is a new and different article of commerce from full hard cold-rolled steel sheet."); Uniden Am. Corp. v. United States, 24 CIT 1191, 1194, 120 F. Supp. 2d 1091, 1095 (2000) ("Here, each cordless telephone has experienced a change in both name and use from its original materials.").

In applying the test, the U.S. Court of Appeals for the Federal Circuit has emphasized the requirement that there be a "new and different" article that emerges from the manufacturing process. See, e.g., Acetris Health LLC v. United States, 949 F.3d 719 (Fed. Cir. 2020); Zuniga v. United States, 996 F.2d 1203 (Fed. Cir. 1993); Azteca Milling Co. v. United States, 890 F.2d 1150 (Fed. Cir. 1989); see also Anheuser-Busch Brewing Ass'n v. United States, 207 U.S. 556, 562 (1908) ("There must be transformation; a new and different article must emerge.").

## II. Discussion

The dispositive question in this action, as noted over the course of the litigation, is whether the subject merchandise was substantially transformed at the Cyber Power Philippines factory. In denying cross-motions for summary judgment, the court found that,

while the subject merchandise underwent a change in name in the Philippines, that "change . . . alone [did] not appear sufficient to constitute a 'substantial transformation,'" and "that a determination as to the resulting 'character' and 'use' of the subject merchandise after production at Plaintiff's Philippine facility require[d] analysis and adjudication." Cyber Power, 46 CIT at ___, 560 F. Supp. 3d at 1356–57 ("[T]he factual details as to the extent and nature of Cyber Power's operations regarding the subject merchandise in the Philippines also remain in dispute."); see also Pl.'s Mot. for Summ. J., ECF No. 48; Def.'s Cross-Mot. for Summ. J., ECF No. 60.

### A. Findings of Fact

On August 8–11, 2022, the court held a bench trial to decide whether the subject merchandise was properly marked under 19 U.S.C. § 1304(a) as "Made in Philippines." Trial, ECF Nos. 144–47. Thereafter, the parties submitted proposed findings of fact and conclusions of law. See Plaintiff's Proposed Findings of Fact and Conclusions of Law, ECF No. 157 ("Pl.'s FOF & COL"); Defendant's Proposed Findings of Fact and Conclusions of Law, ECF No. 158 ("Def.'s FOF & COL").

#### 1. Uncontested Facts Regarding the Subject Merchandise

Before trial, the court delineated the uncontested facts in its Pretrial Order. See Pretrial Order, Schedule C, ECF No. 142 ("Jt. Uncontested Facts"). The UPS devices at issue are Model Nos. CP600LCDa, CBN50U48A-1, CST135XLU, OR500LCDRM1U, and SX650U, and the SVP device is Model No. HT1206UC2RC1. See Jt. Uncontested Facts ¶¶ 1–2.

The UPS devices essentially serve as backup batteries for a range of electronic devices and electrical appliances. See, e.g., Jt. Uncontested Facts ¶ 14 (Model No. OR500LCDRM1U); see, e.g., id. ¶ 17 ("If power to a connected device is lost, [this model] activates a lead acid battery, which provides emergency power to the connected device until power is restored[.]"). These devices assist in a "graceful shutdown" during a power failure so as "to protect against the loss of data and damage to valuable electronics." Id. ¶¶ 25, 33, 41, 48. To make the UPSs function as intended, all five subject models contain "firmware"—computer code—that is written in Taiwan and programmed on the main PCBAs of each device. Id. ¶¶ 19, 27, 35, 43 & 51; see also Trial Vol. III at 377–80 (Plaintiff's witness Thomas L. Fuehrer explaining general function of firmware).

The surge protector, SVP Model No. HT1206UC2RC1, provides "surge protection of up to 2880 joules to connected devices." Jt. Uncontested Facts ¶ 56. Unlike the UPS devices, it contains neither firmware nor a battery. Trial Vol. III at 436, ECF No. 151; Deposition Transcript of Chi-Ting (Tim) Huang at 149, ECF No. 153 ("Huang Dep.").

With respect to four of the UPS devices and the single SVP device, it is undisputed that the majority of their components, including the main printed circuit board assemblies ("PCBAs"), were manufactured in China. Jt. Uncontested Facts ¶¶ 18, 20–23, 26, 28–31, 34, 36–39, 50, 52–55, 58, 60–63. Throughout this litigation, Plaintiff contended, and Defendant disputed, that the main PCBA for UPS Model No. CP600LCDa was manufactured in the Philippines. See Huang Dep. at 40.[3]

[3] Mr. Huang's deposition was used as the majority of his direct testimony at trial.

The main PCBA controls all the functions of the device in which it is installed. See Huang Dep. at 40; Trial Vol. III at 417. In its presentation of the case, Plaintiff identified multiple other PCBAs within certain of the models of the subject merchandise, in addition to the main PCBAs. See, e.g., Huang Dep. at 87–93. Plaintiff also presented testimony generally addressing the specifications and functions of PCBAs—namely, that "a printed circuit board assembly is the fiberglass board [inside a UPS, for example] with the copper traces attached to it that are embedded inside it. Those copper traces connect the components that are also located on the printed circuit board. . . . [T]he assembly is the board plus all the components." Trial Vol. III at 375–76.

**2. Trial Witnesses and Admitted Evidence**

Plaintiff's principal witness, Chi-Ting "Tim" Huang, is an employee of Cyber Power Systems Inc. ("Cyber Power Taiwan"), who is assigned to and serves as the general manager of Cyber Power Philippines.[4] Huang Dep. at 6–8, 13; Trial Vol. I at 46–48, ECF No. 149. Mr. Huang testified that he "manage[s] all the departments at the [Philippines] factory[,] execute[s] the short-term, medium-term, and long-term plans of the company[, and] appl[ies] for all the relevant documents for the company from the Philippines government." Trial Vol. I at 46. Mr. Huang's testimony primarily consisted of a review of Plaintiff's trial exhibits relating to each model of the subject merchandise. See generally Huang Dep.; Plaintiff's Trial Exhibits ("PTX") 6–63. During trial, Mr. Huang also guided the court through a demonstrative video depicting the operations in July 2020

[4] Cyber Power Taiwan is the parent company of Plaintiff, Cyber Power Philippines, and other entities. Jt. Uncontested Facts ¶ 64; Huang Dep. at 13; Trial Vol. III at 522, 527.

at the Cyber Power Philippines factory.[5] Trial Vol. I at 48–122; Trial Vol. II at 128–222, ECF No. 150; Jt. Trial Exhibit 1.

At trial, and as memorialized in its Proposed Findings of Fact and Conclusions of Law, Defendant challenged Mr. Huang's credibility on the basis of discrepancies in his signature used to sign various documents, inconsistencies in his testimony about the relationship between Cyber Power Philippines and a related entity, Phisonic, and errors in his explanation of the July 2020 demonstrative video. See Def.'s FOF & COL at 24–27 ("These examples of implausible testimony reveal a witness whose testimony should be seen as untrustworthy and, thus, not credited unless corroborated by other, unimpeachable evidence.").

As a threshold matter, the court notes the limited relevance of any testimony regarding Cyber Power's corporate structure and relationship with Phisonic to the substantial transformation issue. As explained below, the court finds that Mr. Huang's testimony contained evidentiary gaps regarding certain aspects of the assembly of the subject merchandise during the relevant time period. See infra pp. 18–24. Even though these gaps detract from his credibility, the court finds that Mr. Huang's demeanor on the stand, along with his direct answers regarding the technically complex subject merchandise, rendered him a credible witness overall.

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[5] As a demonstrative exhibit, the video was not entered into evidence. See, e.g., Trial Vol. II at 188, ECF No. 150; Pre-Trial Order, Schedule C-1, ¶ 69 (Plaintiff's Statement of Material Facts in Dispute) ("The video record does not purport to depict the manufacture of the specific goods which are the subject of this action, but is proffered as a demonstrative or pedagogical exhibit, in accordance with Rule 611 of the Federal Rules of Evidence.").

Plaintiff's remaining witnesses were Thomas L. Fuehrer, the electrical project manager at Cyber Power, and Brent A. Lovett, the general manager and president of Cyber Power. Trial Vol. III at 360, 362, 478. The Government's witnesses were Linda Horacek, an import specialist on Customs' electronic enforcement team, and Karl Moosbrugger, a national import specialist at Customs, who were involved in the administrative investigation and protest determination. Id. at 596, 608, 611–17; Trial Vol. IV at 789, 825, ECF No. 152.

At trial, Cyber Power again raised its relevance objection to testimony by Defendant's witnesses "dealing with the administrative process by which the protest was decided." Trial Vol. III at 593. This objection was previously denied by the court. See ECF Nos. 135, 136. As the court explained at trial, and reiterates now, in presiding over a bench trial the court maintains the ability to ignore any testimony that it finds to be irrelevant. Here, every witness other than Mr. Huang lacked personal knowledge as to the operations at the Cyber Power Philippines factory. Accordingly, the probative value of their respective testimony is minimal because it does not assist the court in resolving the central question—whether those operations, occurring in early 2020, constituted a substantial transformation of the subject merchandise.

**3. Operations in the Philippines**

To determine whether substantial transformation of the subject merchandise occurred in the Philippines, the court has reviewed the admitted evidence and testimony pertaining to the manufacture of each model of subject merchandise during the relevant time period—early 2020 up to the date of entry, March 27, 2020. Jt. Uncontested

Facts ¶ 1; ECF No. 20-1; see also Trial Vol. III at 452, 454 (establishing that UPS Model No. CBN50U48A-1 went into production and entered marketplace in March 2020). Although the parties do not identify exact dates, they appear to be in agreement that the subject merchandise was manufactured in early 2020. See, e.g., Huang Dep. at 36, 65, 68, 84; Trial Vol. II at 153, 295 (questioning by Defendant making reference to early 2020 as relevant time period).

During direct examination, Mr. Huang identified and described the contents of various documentary exhibits associated with the production process of each model of UPS or SVP in issue. He also testified that Cyber Power Philippines began "manufacturing" UPSs and SVPs in October 2018, and that Phisonic, a related entity operating in the same building as Cyber Power Philippines, was incorporated in March 2019 and has been manufacturing PCBAs since September 2019. Id. at 26–29; see PTX 8.

For each of the six devices at issue, Plaintiff submitted the following information as separate exhibits: "Spec Sheets" for each device (PTX 9, 18, 20, 28, 37, 46, and 55); "User Manuals" (PTX 10, 19, 29, 38, 47, and 56); Bills of Materials for the components of each device (UPS or SVP) (PTX 11, 21, 30, 39, 48, and 57); and Bills of Materials for the components of each PCBA (main boards and other boards, if applicable) (PTX 12, 22, 31, 40, 49, and 58). Plaintiff also introduced exhibits purporting to show the manufacturing process for each device: "Production Timelines" (PTX 13, 23, 32, 41, 50, and 59); "Manufacturing Process Flowcharts" (PTX 14, 26, 35, 44, and 53, and 62); and "Standard Operating Procedures" for both the PCBA(s) and device assembly processes

(PTX 15, 24, 25, 33, 34, 42, 43, 51, 52, 60, and 61). Finally, for each device, Plaintiff submitted schematics for each device's PCBA(s), dimension drawings, and "exploded" view diagrams of the finished UPS and SVP devices (PTX 17, 27, 36, 45, 54, and 63).

For five of the six models of subject merchandise, it is undisputed that the main PCBAs were manufactured in China. Before discussing the assembly process for all of the UPS and SVP devices, the court addresses the disputed origin of UPS Model No. CP600LCDa's main PCBA.

**i. Origin of UPS Model No. CP600LCDa's Main PCBA**

To support its position that the CP600LCDa was manufactured in the Philippines from the PCBA stage onward, Plaintiff submitted additional documentary evidence—specifically, "work orders" and "set issuing" records—that purport to show the production of PCBAs by Phisonic. See PTX 16. This additional evidence, together with the contents of the core documentary exhibits and Mr. Huang's testimony, permits the court to draw the necessary factual inferences to conclude that the main PCBAs for the subject CP600LCDa devices were manufactured in the Philippines.

For the CP600LCDa, the Spec Sheet and User Manual are consumer-facing documents that reveal nothing about the manufacture or country of origin for the subject devices or their main PCBAs.[6] See PTX 9 & 10. Mr. Huang testified, based on these

[6] Both the Spec Sheet and User Manual refer to the device as "CP600LCD," which the parties appear to treat as an interchangeable name for the CP600LCDa. See, e.g., Pl.'s FOF & COL ¶ 45; Def.'s FOF & COL ¶ 22. The same seems true for a different UPS device, Model No. OR500LCDRM1U. Compare PTX 37 (Spec Sheet for OR500LCDRM1U), with PTX 39 (Bill of Materials for OR500LCDRM1Ua).

exhibits and his personal knowledge, that the CP600LCDa was "manufactured" at Cyber Power Philippines as of early 2020 and is still in production there, and that the User Manual would be packed with each device before shipping. Huang Dep. at 35–36.

The CP600LCDa's Bills of Materials (i.e., "component lists" for both the main PCBA and the UPS in its entirety) are undated, but provide references to the country of origin for each type of component. PTX 11 & 12. Notably, both Bills of Materials state that the device's firmware (Part No. 0PA-0000506-03) "is designed and coded in Taiwan; [and] loaded in Philippines." PTX 11 & 12 (emphasis added). Mr. Huang specifically testified that the Bill of Materials for the CP600LCDa's main PCBA showed 128 types of components that were combined by Phisonic employees in the Philippines to produce that main PCBA. Huang Dep. at 39–40, 45.

The Manufacturing Procedure Flowchart for the CP600LCDa corroborates the foregoing exhibits by listing the Philippines as the country where firmware is loaded. See PTX 14; see also PTX 15 at 01089 (Standard Operating Procedure) (showing, as general matter, that firmware burning for CP600LCDa is step of PCBA manufacturing process). Mr. Huang testified that he personally observed the processes shown in the Flowchart, and that "descriptions of the operations that are performed" in the Philippines were accurate. Huang Dep. 46–47. While the component lists and the Flowchart lack dates, when these exhibits are read together with the remaining exhibits pertaining to the CP600LCDa's manufacture, the court can draw key inferences as to the origin of the subject model's main PCBA.

Turning next to the Production Timeline for the CP600LCDa, this exhibit lists the Philippines as the country location for both the PCBA operations (Surface Mount Device ("SMD" or "SMT" for "Surface Mount Technology"), Auto-Insertion ("AI"), and Dual in-line package ("DIP")) and the assembly and testing of that model of UPS. PTX 13. Mr. Huang testified that Phisonic employees conducted the SMD, AI, and DIP operations in the Philippines, while Cyber Power Philippines employees completed the UPS assembly, testing, and packaging. Huang Dep. at 45–46.

While the production timeline lacks dates, it includes a production quantity—1,440 units—that also appears in the additional documentation provided for the CP600LCDa: the "work orders" and "set lists." See PTX 13 & 16; Huang Dep. at 43 ("[Y]ou can see the quantity for the purchase order[,] which is 1,440."). These work orders and set lists reflect each stage of the PCBA manufacturing process—SMD, AI, and DIP assembly—for a total quantity of 1,440 PCBA boards.[7] PTX 16. Further, these work orders and set lists include a date range—September 2019 through February 2020—for the PCBA manufacturing process as a whole that is consistent with Plaintiff's claimed timeline for manufacture of the subject merchandise. Id.; see also Huang Dep. at 29 (testifying that Phisonic began manufacturing PCBAs in Philippines in September 2019). Finally, the work orders and set lists repeatedly reference "Phisonic," as the company conducting the listed operations, which again is consistent with Mr. Huang's testimony that the main PCBAs for the subject CP600LCDa UPSs were manufactured by Phisonic in the Philippines as of early 2020.

[7] The CP600LCDa is the only model of subject merchandise for which a production quantity can be consistently traced across multiple documents.

Huang Dep. at 55 (testifying that PCBA manufacturing machines shown in PTX 16 were Phisonic's machines).

The remaining exhibits pertaining to the CP600LCDa—Standard Operating Procedures for main PCBA and UPS assembly, and diagrams showing PCBA circuitry and the UPS components—provide little additional support for the country of origin of the PCBAs, as they are generalized instructional and informational documents. See PTX 15 & PTX 17. Mr. Huang testified that the Standard Operating Procedures are posted at workstations at the Cyber Power Philippines factory and that "the operator or the worker of that workstation would then perform the job according to the manual." Huang Dep. at 51–52. Although the Procedures are dated "First draft: 2018, Revised in 2019," Mr. Huang failed to confirm whether the workers who manufactured the subject merchandise in early 2020 acted in accordance with them. See id.; PTX 15. There is nothing contained in the Procedures, such as the identification of a specific order or quantity, to tie them to the subject merchandise. Likewise, the circuit diagrams for all of the PCBAs (dated 2018) and UPS assembly diagrams (undated) for the CP600LCDa do not provide information establishing the country of origin for its main PCBA. PTX 17.

For its part, Defendant argues that Plaintiff has failed to establish that the main PCBAs for the subject CP600LCDa devices were manufactured in the Philippines. According to Defendant, "Cyber Power's failure to provide sufficient documentation actually tied to the articles comprising the subject merchandise detained by [Customs] leaves the Court with no ability to evaluate this claim with confidence." Def.'s FOF & COL at 32. Specifically, the Government points to (1) an invoice purporting to show that a part

of the main PCBA for the CP600LCDa was shipped to China rather than the Philippines (Defendant's Trial Exhibits ("DTX") 4 & 5), and (2) a report from an audit of the Cyber Power Philippines factory in February 2020 (DTX 9). See Def.'s FOF & COL at 32–34. The audit report states that, as of February 28, 2020, there were PCBA manufacturing operations taking place in the Philippines, but those operations appeared to be less than fully organized. See, e.g., DTX 9 at 02055 ("Although responsibilities for the new processes were assigned, there were no records to demonstrate who are assigned to specific process . . . . Moreover, Job Descriptions for these processes were not available.").

The court finds that it is unable to draw Defendant's preferred factual inferences from the cited exhibits. The invoice, which appears to show a part of the main PCBA for the CP600LCDa, is dated June 27, 2019—prior to the dated work orders and set lists for the CP600LCDa on which Plaintiff relies. DTX 5. Without additional context, it is unclear what the invoice can prove about the manufacture of the CP600LCDa's main PCBA in later 2019 and early 2020. As to the audit report, the court's findings with respect to the country of origin of the CP600LCDa's main PCBA do not depend on a thorough understanding of Phisonic's corporate structure or the sophistication of its operations. Rather, the court merely concludes that Phisonic is indisputably located in the Philippines. See, e.g., PTX 7 (showing Phisonic's factory layout in Philippines); Def.'s FOF & COL at 24 (arguing that Phisonic may be a mere "proxy" for Cyber Power Philippines). Thus, the watermark "Phisonic" on Plaintiff's admitted work orders and set lists from late 2019

to early 2020 tilts the scales in favor of a finding that the main PCBAs for the subject CP600LCDa devices were manufactured in the Philippines.

As a whole, Plaintiff's documentary evidence contains consistent references to the Philippine production of the main PCBA for the CP600LCDa, quantity-specific work orders and set lists showing dates corresponding with the approximate timeframe during which the subject merchandise was manufactured, and comports with Mr. Huang's testimony as to his personal knowledge of operations occurring at Phisonic and Cyber Power Philippines in early 2020. Based on the totality of this evidence, the court concludes that Plaintiff has proven that the main PCBAs for the subject CP600LCDa devices were manufactured in the Philippines.

The Philippine origin of the CP600LCDa from the main PCBA process onwards distinguishes it from the remaining UPS and SVP devices, for which it is undisputed that the main PCBAs originated in China. Before the court reaches its substantial transformation determination, however, it will address the evidence on the record that purports to establish the nature and extent of the assembly processes for each UPS and SVP device.

**ii. Device Assembly and Testing of All Subject Models**

Unlike the evidence establishing the origin of the CP600LCDa's main PCBA, Plaintiff's evidence of subsequent assembly and testing of the subject UPSs and SVPs does not permit the court to piece together a coherent and detailed manufacturing timeline for the subject merchandise in the Philippines as of the relevant time period (early 2020). The court now addresses the deficiency of each set of exhibits.

First, the Spec Sheets and User Manuals for each model contain no information about the manufacturing process for the subject merchandise. See PTX 9, 10, 18, 19, 20, 28, 29, 37, 38, 46, 47, 55 & 56. Mr. Huang's testimony based on these exhibits confirmed only that he recognized these devices and the general timeline of their manufacture. See, e.g., Huang Dep. at 62–65 (UPS Model No. CBN50U48A-1 was being manufactured at Cyber Power Philippines in early 2020, but has since been "phased out").

The next exhibits—Bills of Materials for the devices and their respective PCBAs, including main PCBAs—do not describe the manufacture of the subject merchandise, but rather, list the types of components that are part of each device or PCBA. See PTX 11, 12, 21, 22, 30, 31, 39, 40, 48, 49, 57, & 58. While they provide the country of origin for each type of component generally, these Bills lack any information to link them to the subject merchandise specifically. They are undated, and do not indicate a total quantity or order of finished merchandise. Indeed, as the Government points out, there is non-specific country of origin information provided for certain components in some of the Bills. See, e.g., PTX 30 at 00032 ln.123 (showing, for "electrolytic cap," that country of origin is "4% from Taiwan, 18% from Japan/Korean, 78% from CHINA); Def.'s FOF & COL at 29. Mr. Huang testified that the percentages represent the relative chance of a given part being from a particular country, and that to confirm the actual country of origin, one must review a "procurement order" to identify the part's supplier. Trial Vol. II at 324–25. From Mr. Huang's testimony, the court infers that the Bills provided are summary-type documents, further distancing them from the subject merchandise. On direct, Mr. Huang testified only as a general matter that these Bills of Materials show the parts used to make

each PCBA—including the main PCBAs—and UPS or SVP device, and confirmed that (for the devices other than CP600LCDa) the PCBAs were assembled in China as of early 2020, while the assembly, testing, and packaging of each device occurred in the Philippines. See Huang Dep. at 66–68 (CBN50U48A-1); id. at 85, 89–90, 92–93 (CST135XLU); id. at 111–13, 116–18 (OR500LCDRM1U); 131–33 (SX650U); id. at 153–55 (HT1206UC2RC1); see also id. at 37–41 (discussing CP600LCDa's Bills of Materials and testifying that PCBA components are assembled in Philippines).

Turning next to the Production Timelines and Manufacturing Process Flowcharts that ostensibly show how the UPS and SVP devices are assembled, the court is faced with the conundrum of similarly weak "connective tissue" between generalized descriptions of the operations at the Cyber Power Philippines factory and the actual assembly of the subject merchandise as it occurred in early 2020. Both sets of exhibits are undated, and lack any additional documentation to confirm that these timelines specifically show the assembly process of the subject merchandise. See PTX 13, 14, 23, 26, 32, 35, 41, 44, 50, 53, 59 & 62. The production quantities and work hours in these exhibits also lack further context to tie them to the subject merchandise. See PTX 13, 23, 32, 41, 50 & 59.

The Standard Operating Procedures, circuit diagrams, dimension drawings, and "exploded" diagrams for each model suffer from similar issues: there is nothing to link these exhibits to specific quantities of merchandise, and no testimony to confirm whether or not these processes were being followed by the workers who assembled the subject

merchandise at the Cyber Power Philippines factory in early 2020. See PTX 15, 17, 24, 25, 27, 33, 34, 36, 42, 43, 45, 51, 52, 54, 60, 61 & 63.

Mr. Huang's testimony regarding these exhibits is noticeably lacking when compared to his testimony on the CP600LCDa. Mr. Huang repeatedly confirmed that he was "familiar" with the operations in each exhibit, that they occurred in China (as to the PCBAs) and the Philippines (as to the UPS and SVP devices), and that the exhibits themselves were "accurate." See Huang Dep. at 69–82 (CBN50U48A-1); id. at 95–107 (CST135XLU); id. at 114–28 (OR500LCDRM1Ua); id. at 137–44 (SX650U); id. at 150–65 (HT1206UC2RC1). He failed to testify, however, that he had personally observed the manufacture of the subject merchandise, or to point to any other evidence that could link its production to these summary, "guidelines"-type exhibits, especially with reference to the necessary timeframe: early 2020. See generally id. The need to tie the evidence to that timeframe is critical because Mr. Huang repeatedly acknowledged that Cyber Power's operations continued to shift from China to the Philippines. For instance, with respect to the CST135XLU, Mr. Huang testified that all of its PCBAs (main board, control board, USB charging board, COAX board, and NTVS board) were manufactured in China as of early 2020, but as of the time of the trial were manufactured by Phisonic in the Philippines. Id. at 87–93. Because many of the documentary exhibits are undated, however, it is difficult to discern which exhibits are concurrent with each other, and which describe operations occurring in different countries.

The questions raised by the lack of consistent dates and other links between the documentary evidence and Mr. Huang's testimony also confuses the operational timeline

with respect to "firmware burning." These inconsistencies and gaps in the record are illustrative of Plaintiff's evidentiary failures. Importantly, Plaintiff argues that the "[f]irmware is applied to the PCBAs in all the subject UPS models. . . . at [the Cyber Power Philippines] plant in the Philippines, using firmware code which was created . . . in Taiwan by Taiwanese firmware engineers." Pl.'s FOF & COL ¶ 85 (emphasis added). Plaintiff goes on to argue that once firmware is burned into a particular Cyber Power device, it cannot be overridden by additional firmware. See Trial Vol. III at 463 ("Q. Once you burn firmware the door is shut? A. That's correct.").

The evidence, however, appears to present a less clear picture. For all of the subject UPS devices, at least some firmware burning occurs during the PCBA manufacturing process, a stage of production that—except for the CP600LCDa—undisputedly occurs in China. See PTX 23, 25, 32, 33, 41, 42, 50, & 51. This is borne out by the documentary evidence: the Bills of Materials for the CBN50U48A-1 list firmware as designed in Taiwan, with the same part number (#0HU-5048017-00) appearing in the Bills for the finished UPS device and the main PCBA. PTX 21, ln.157; PTX 22, ln.157. The Standard Operating Procedure for the CBN50U48A-1's main PCBA lists "Firmware Burn-In" as a step in the main board manufacture, and identifies the firmware by the same part number as the Bills: 0HU-504817-00. PTX 24 at 01032. As of 2020, Plaintiff concedes that these operations took place in China. See Huang Dep. at 68. CBN50U48A-1's Standard Operating Procedure for UPS assembly does not mention firmware. See PTX 25. Nevertheless, Plaintiff contends that the firmware for this device is loaded in the

Philippines, where only UPS assembly, testing, and packaging occurred. Pl.'s FOF & COL ¶ 59 ("The assembled UPS Model No. CBN50U48A-1 is then programmed in the Philippines with firmware which is produced in Taiwan and which enables the electronic components of the UPS to function.").

As another example, the Bill of Materials for the main PCBA of the SX650U states that its firmware was "designed and coded in Taiwan, loaded in Philippines." PTX 49. The Standard Operating Procedures for both PCBA and UPS assembly show firmware burning as a step in the UPS assembly process. PTX 51 at 01210; PTX 52 at 01228. Mr. Huang testified, however, that the firmware burning for the SX650U "[i]nitially . . . was done in China." Huang Dep. at 140 ("Q. So when you made this main board in China, you did some firmware burning in China? A. Yes."). Plaintiff has failed to explain this seeming contradiction.

Based on the foregoing, the court concludes that Plaintiff has failed to carry its burden of producing evidence to show that five of the six models of subject merchandise—UPS Model Nos. CBN50U48A-1, CST135XLU, OR500LCDRM1U, SX650U, and SVP Model No. HT1206UC2RC1—were substantially transformed in the Philippines. Plaintiff's evidence does not establish what operations occurred in the Philippines to produce these subject devices to permit the court to conduct a substantial transformation analysis.

A distinction must be made, however, for the CP600LCDa. Having determined that its main PCBA originates in the Philippines, the court is able to infer that the majority of its manufacture—multi-phase assembly of its main board, and assembly and testing of

the ultimate UPS device—took place in the Philippines. Accordingly, the court proceeds to a substantial transformation analysis for the CP600LCDa.

**B. Conclusions of Law**

In a civil action, preponderance of the evidence means "the greater weight of evidence, evidence which is more convincing than the evidence which is offered in opposition to it." Bosun Tools Co. v. United States, 43 CIT ___, ___, 405 F. Supp. 3d 1312, 1315 (2019) (quoting Hale v. Dep't of Transp., 772 F.2d 882, 885 (Fed. Cir. 1985)). Here, Plaintiff Cyber Power bore the burden of proof that the assembly it alleged took place in the Philippines with respect to the six models of subject merchandise constituted "substantial transformation" under the "name, character, or use" test, such that "new and different" articles emerged.

**1. UPS Model No. CP600LCDa Was Substantially Transformed in the Philippines**

As the court articulated in its summary judgment opinion, the substantial transformation test is not straightforward to apply. Cyber Power, 46 CIT at ___, 560 F. Supp. 3d at 1351. Nevertheless, courts deciding issues of substantial transformation have established several guiding tenets and consistently emphasized the case-by-case nature of the test. See, e.g., Nat'l Hand Tool v. United States, 16 CIT 308, 311 (1992), aff'd 989 F.2d 1201 (Fed. Cir. 1993) ("To determine whether a substantial transformation of an article has occurred . . . each case must be decided on its own particular facts." (quoting Uniroyal, Inc. v. United States, 3 CIT 220, 224, 542 F. Supp. 1026, 1029 (1982))).

The court reiterates its prior rejection of two potential alternatives to the substantial transformation test of name, character, or use: first, an "essence"-based

approach that would look only to whether the essential or critical component of a product had been transformed; and second, an approach that would per se decide whether substantial transformation had occurred on a component-by-component basis. See Cyber Power, 46 CIT at ___, 560 F. Supp. 3d at 1354 ("The court agrees with Plaintiff that Defendant's proposed focus on the PCBA and the application of an 'essence' or 'critical component' test here is without merit. The Government's suggestion to focus solely on the PCBA components[8] of the subject merchandise may well undermine the objective of the 'substantial transformation' test, namely to focus on a change in name, character, or use."); id. ("While the intended use of components may provide some insight as to whether the assembly of those components into the finished merchandise accomplishes a change in use that indicates a 'substantial transformation,' such a consideration is but one of many for the court to consider as part of the 'totality of the evidence.'" (citation omitted)). The Government's approach does not promote uniformity, consistency, and predictability in the application of the substantial transformation test. Consequently, the court does not read the prior caselaw on that test as having altered the fundamental requirements of "name, character, or use" by narrowing it to an essence- or component-based interpretation.

[8] To be functional, the subject UPS devices require multiple components in addition to the main PCBA—including, but not limited to, firmware unique to each model, and a battery. Without these components, the main PCBA cannot individually perform the functions of a UPS. See, e.g., Huang Dep. at 61, 82, 147; Trial Vol. III at 385–86; Trial Vol. IV at 911.

Rather, a change in name, character, or use turns on the nature of the potentially transformative processing, considered in the context of the particular kind of merchandise being manufactured. See Meyer Corp., U.S. v. United States, 43 F.4th 1325, 1331 (Fed. Cir. 2022) (holding that "the trial court correctly focused its inquiry on manufacturing steps that changed the shape, form, chemical properties, and mechanical properties" of a product).

Because the court finds that the entirety of the CP600LCDa's manufacture occurred in the Philippines, the court need not make a determination as to whether its UPS assembly process alone constituted a substantial transformation. The CP600LCDa began its manufacturing journey in the Philippines as a set of components not yet functional as a power source of any kind. See Huang Dep. at 39–40, 45 (128 types of components were combined in Philippines to assemble CP600LCDa's main PCBA). After several stages of manufacturing, each involving numerous steps directed toward changing the electronic properties of the device as a whole, the CP600LCDa left the Philippines as a fully functioning UPS. It is undisputed that that the CP600LCDa is capable of providing "battery backup (using simulated sine wave output) and surge protection for desktop computers, workstations, networking devices, and home entertainment systems," and that, thanks to its programming, "is able to provide real time status and alerts of potential problems." Jt. Uncontested Facts ¶¶ 40, 42. Even without detailed evidence describing the assembly stage of UPS production, the change from all of its components to its ultimate finished product as a UPS device is a change so marked as to shift the burden of proof in Plaintiff's favor.

Thus, the court holds that Cyber Power's operations in the Philippines resulted in a "new and different article": the CP600LCDa. Indeed, the CP600LCDa's Philippine manufacture satisfies all three prongs of the substantial transformation test: a change in name (from a set of PCBA and UPS component parts to the finished, functioning UPS Model No. CP600LCDa), a change in character (from component parts not yet capable of being electronically programmed to a device capable of performing a number of intelligent functions), and a change in use (from component parts to a device geared towards a specifically identified purpose: protecting against power outages).

Accordingly, the subject UPS Model No. CP600LCDa devices should be marked as products originating from the Philippines under 19 U.S.C. § 1304(a).

**2. Plaintiff Failed to Carry Its Burden of Proof as to UPS Model Nos. CBN50U48A-1, CST135XLU, OR500LCDRM1U, SX650U, and SVP Model No. HT1206UC2RC1**

The court now turns to the country of origin of the remaining models of subject merchandise. As articulated in its Findings of Fact, the court determined that Plaintiff's evidence in this case is undercut by its lack of connection to the subject merchandise and the existence of unanswered questions and unresolved conflicts among the documentary evidence, Mr. Huang's testimony, and Plaintiff's contentions in its Proposed Findings of Fact and Conclusions of Law.

Before trial, the court was faced with many questions pertaining to the subject UPS and SVP devices: how the production process in the Philippines evolved as more of Cyber Power's operations shifted there; when and where discrete steps of the so-called "assembly" process, such as firmware burning, were taken; and whether Plaintiff could

submit evidence of assembly procedures that depicted the manufacturing process of the subject merchandise.

Based on Mr. Huang's testimony and Plaintiff's admitted exhibits, the trial did not provide answers to these questions. The court thus holds that Plaintiff has failed to prove, by a preponderance of the evidence, that five of the six subject models are products of the Philippines. The court cannot reliably discern how the parts of the remaining four UPS devices, or the single SVP device at issue, were assembled into fully functioning products. Plaintiff failed to present the specific testimony describing the assembly process of the subject devices for the relevant time period, and instead focused on a general overview of its product types and manufacturing operations. See, e.g., Huang Dep. at 74–75, 104–05, 123–25, 138, 161–65. Thus, no witness with personal knowledge confirmed that the assembly operations depicted in the documentary exhibits fully reflected the manufacture of the subject merchandise. Without such testimony, the documentary evidence alone does not establish what the assembly process for the subject UPS and SVP devices looked like in early 2020.

Furthermore, discrepancies between the exhibits and Mr. Huang's testimony with respect to where and at what stage certain steps were performed, along with the absence of dates, quantities, and other merchandise-specific information, leave the court unable to determine whether the devices were substantially transformed in the Philippines. That the devices left the Philippines with new names cannot suffice to prove that "new and different article[s] emerged" from the operations at Cyber Power Philippines factory.

Simply put, with the exception of the CP600LCDa, this is a case in which Plaintiff has failed in its burden of proof from the outset.

## III. Conclusion

For the foregoing reasons, the court finds that country of origin for UPS Model No. CP600LCDa is the Philippines, and the country of origin for the remaining five models of subject merchandise is China. Judgment will enter accordingly.

/s/ Leo M. Gordon
Judge Leo M. Gordon

Dated: February 27, 2023
New York, New York