

**United States Court of Appeals
for the Federal Circuit**

**DIEBOLD NIXDORF, INC., DIEBOLD SELF-
SERVICE SYSTEMS,**
Appellants

v.

INTERNATIONAL TRADE COMMISSION,
Appellee

**HYOSUNG TNS INC., NAUTILUS HYOSUNG
AMERICA INC.,**
Intervenors

2017-2553

Appeal from the United States International Trade
Commission in Investigation No. 337-TA-989.

Decided: August 15, 2018

PATRICK FLINN, Alston & Bird LLP, Atlanta, GA, argued for appellants. Also represented by KEITH E. BROYLES, PAMELA COUNCILL, DAVID FRIST, JOSHUA MARK WEEKS; ADAM SWAIN, Washington, DC.

PANYIN HUGHES, Office of the General Counsel, United States International Trade Commission, Washington, DC, argued for appellee. Also represented by DOMINIC L.

BIANCHI, WAYNE W. HERRINGTON.

GREGORY G. GARRE, Latham & Watkins LLP, Washington, DC, argued for intervenors. Also represented by GABRIEL BELL, ELANA NIGHTINGALE DAWSON, KEVIN WHEELER.

Before PROST, *Chief Judge*, BRYSON and O'MALLEY,
Circuit Judges.

O'MALLEY, *Circuit Judge*.

Appellants Diebold Nixdorf, Inc. and Diebold Self-Service Systems (together, “Diebold”) appeal the International Trade Commission’s (“ITC” or “Commission”) finding that they violated § 337 of the Tariff Act of 1930 by importing components of automated teller machines (“ATMs”) that infringe claims 1–3, 6, 8, and 9 of U.S. Patent No. 8,523,235 (“the ’235 patent”). Diebold challenges the Commission’s determination that these claims, all of which recite the term “cheque standby unit,” are not invalid for indefiniteness. *See Certain Automated Teller Machines, ATM Modules, Components Thereof, and Prods. Containing the Same*, Inv. No. 337-TA-989, 2017 ITC LEXIS 1603 (USITC Mar. 13, 2017). It also challenges the Commission’s construction of certain claim limitations and its application of those constructions to Diebold’s accused ATM components and the asserted domestic industry products. *See id.*

We conclude that the term “cheque standby unit” in the ’235 patent is a means-plus-function term subject to 35 U.S.C. § 112, para. 6, which lacks corresponding structure disclosed in the specification. We therefore reverse the Commission’s finding that Diebold violated § 337.

I. BACKGROUND

A. The '235 Patent

The '235 patent describes an ATM—*i.e.*, a “cash and cheque automatic depositing apparatus”—that is capable of performing banking transactions, and more particularly is “capable of automatically depositing a bundle of cashes and cheques inserted at once.” '235 patent, col. 1, ll. 6–11. It accomplishes these goals by performing several steps: (1) separating deposited bundles into individual banknotes; (2) transferring those notes horizontally through the ATM; (3) verifying the authenticity or abnormality of each note; (4) sorting and processing the notes based on how each was verified; and (5) preparing the notes for depositing into storage safes. *Id.* col. 1, l. 40–col. 2, l. 3.

One component recited in each of the '235 patent's nine claims is a “cheque standby unit.” The claims specify that the “cheque standby unit” is “placed in the main transfer path between the first gate and the second gate” and is “configured to hold the at least one authentic cheque to return the at least one authentic cheque to the user responsive to receiving user instructions cancelling depositing of the at least one authentic cheque.” *Id.* col. 10, ll. 50–55.

The specification does not mention a “cheque standby unit,” but instead references a “cheque temporary standby unit” in three portions of the detailed description. First, it explains that the ATM “includes a cheque temporary standby unit **120** formed on the main transfer path **106a** provided at a rear side of the first gate **112**, for temporarily stopping a transfer of authentic cheques,” as well as “an endorsement printing unit **122** followed by the cheque temporary standby unit **120** on the main transfer path **106a**, for printing endorsement information on the authentic cheques according to printing instructions.” *Id.*

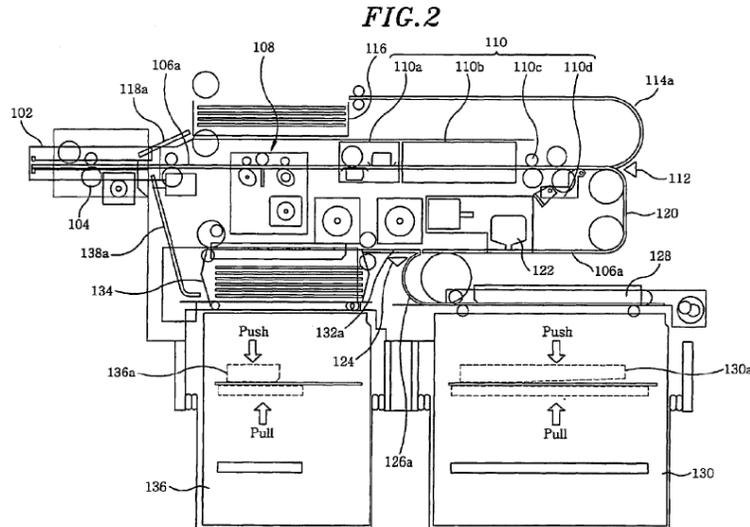
col. 2, l. 62–col. 3, l. 2. It later explains the function of the cheque temporary standby unit in more detail:

the cheque temporary standby unit **120** formed on a specific section of the main transfer path **106a** between the first gate **112** and the main transfer path **106a** temporarily stops a transfer of authentic cheques verified by the banknote verifying unit **110**. Before the cheques are subjected to an endorsement printing indicating that the rights relating to the cheques are transferred from customers to the bank, the cheques are held for the user as an owner to input an instruction. When a depositing instruction is inputted, the cheques are transferred to the endorsement printing unit **122**. On the contrary, when a depositing cancellation instruction is inputted, the cheques are transferred to the bundle insertion opening **102** or the abnormal banknote temporary storage **116** by a reverse driving of the main transfer unit **106** so that they can be returned to the user.

The endorsement printing unit **122** performs the endorsement printing only when the banknote verifying unit **110** verifies that the cheques are authentic and, also, when the cheque temporary standby unit **120** receives an owner's final depositing instruction.

Id. col. 5, ll. 40–59. Finally, the specification describes “a preferable entire operation” of the invention, in which checks that have been separated and transferred along the main transfer path “are temporarily held by the cheque temporary standby unit **120** formed on a specific section of the main transfer path **106a**,” where they are held until a user selects either a depositing consent or cancellation. *Id.* col. 7, l. 65–col. 8, l. 6. “Cheque tempo-

rary standby unit **120**” is depicted on the right-hand side of Figure 2:



The “cheque standby unit” limitation was added during prosecution to overcome prior art that purportedly permitted cheques to be stored in a safe, but did not disclose returning stored cheques to the user after the user canceled a deposit. J.A. 559–61, 564–65.

B. The ITC Proceedings

In February 2016, Intervenor Hyosung TNS Inc. and Nautilus Hyosung America Inc. (together, “Hyosung”), which own the ’235 patent by assignment, filed a complaint with the ITC against Diebold,¹ alleging violations of § 337 by reason of Diebold’s infringement of four patents related to ATMs. The Commission instituted an

¹ During the pendency of the ITC proceedings, Diebold acquired the majority of shares of German ATM manufacturer Wincor Nixdorf, Inc., and was renamed Diebold Nixdorf, Inc.

investigation, and three of the four patents—all but the '235 patent—were subsequently terminated from the investigation pursuant to motions by Hyosung. The accused products are Diebold's ATMs that can receive and process both cash and checks in a single, mixed bundle that is inserted at once, and a module used in these ATMs. J.A. 76–77.

The administrative law judge (“ALJ”), after holding an evidentiary hearing, issued an Initial Decision, finding not only that the accused module directly infringed claims 1–3, 6, 8, and 9 of the '235 patent and that Diebold contributorily infringed the claims by importing the module, but also that the claims of the '235 patent are not invalid. In relevant part, the ALJ concluded that the term “cheque standby unit” is not indefinite. First, he agreed with Hyosung that the term should be given its plain and ordinary meaning, concluding that a person of ordinary skill in the art “would understand that a structure in an ATM that temporarily holds checks pending the customer confirming the deposit is the cheque standby unit,” and that, “[i]n general, a cheque standby unit is the escrow that temporarily holds checks.” J.A. 141. He expressly credited the testimony of Hyosung's expert, Dr. Howard, stating he “described how the phrase ‘a cheque standby unit’ would necessarily have a structural meaning to such a person, and would refer to the physical portion of a cash-and-check depositing module that is comprised of well-known components for holding cheques in a standby configuration pending user confirmation of the deposit.” J.A. 141.

The ALJ also examined the claim limitation under the assumption that “cheque standby unit” is a means-plus-function term, and determined that the '235 patent discloses the required structure of “stacking and temporary storage of media.” J.A. 142. The ALJ then stated that a person of ordinary skill in the art would find corresponding structure in Figure 2's teaching of “a cheque standby

unit 120 that temporarily stores at least one authentic cheque by holding it in position on the belt.” J.A. 142.

The Commission, after undertaking review of the ALJ’s Initial Decision on issues not involving the “cheque standby unit,” issued its Final Determination finding a violation of § 337, in addition to a Limited Exclusion Order and Cease and Desist Orders. Diebold appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(6).

II. DISCUSSION

Diebold argues on appeal that “cheque standby unit” is a purely functional term that connotes no specific structure and is therefore subject to § 112, para. 6.² Specifically, it contends that the word “unit” is a “generic nonce word” akin to “mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than verbal constructs,” Appellant Br. 30 (quoting *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015) (en banc)), and highlights that the ’235 patent recites thirteen different “unit” elements in the claims, each of which has a unique function. Diebold explains that the specification includes no discussion of a specific structure of the “cheque standby unit,” and instead defines the term exclusively by its function and location. It then points out that Hyosung’s expert did not testify that the term “cheque standby unit” connotes sufficiently definite structure, but instead testified that the term encompasses all structures capable of fulfilling the function of temporarily holding checks pending the customer confirming the deposit, including a nonexhaustive list of structures as varied as a “suction cup,” a “trap door,” and a “drum.”

² Because the application leading to the ’235 patent was filed prior to September 16, 2012, we apply pre-AIA § 112.

The Commission and Hyosung first respond by arguing that Diebold failed to present evidence of its own to rebut the presumption that § 112, para. 6 does not apply to this term. Second, they contend that the ALJ properly determined that the term is not subject to application of this provision because both the intrinsic and extrinsic evidence—in particular, the expert testimony of Dr. Howard—demonstrate that a person of ordinary skill in the art would understand the term “cheque standby unit” to denote structure. Finally, Hyosung argues that, even if the term is subject to § 112, para. 6, the specification recites sufficient structure for performing the claimed function in Figure 2, in view of Dr. Howard’s testimony.

A. Standards of Review

We review the Commission’s final determinations under the standards of the Administrative Procedure Act (“APA”). *See* 19 U.S.C. § 1337(c) (stating that “[a]ny person adversely affected by a final determination of the Commission” may appeal to this court “for review in accordance with chapter 7 of title 5”). Under the APA, we review legal determinations *de novo* and findings of fact for substantial evidence. *Ajinomoto Co., Inc. v. Int’l Trade Comm’n*, 597 F.3d 1267, 1272 (Fed. Cir. 2010); *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1355 (Fed. Cir. 2007).

“Regarding questions of claim construction, including whether claim language invokes 35 U.S.C. § 112, para. 6,” a trial court’s “determinations based on evidence intrinsic to the patent as well as its ultimate interpretations of the patent claims are legal questions that we review *de novo*.” *Williamson*, 792 F.3d at 1346 (citing *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, — U.S. —, 135 S. Ct. 831, 840–41 (2015)); *see also Cisco Sys., Inc. v. Int’l Trade Comm’n*, 873 F.3d 1354, 1360 (Fed. Cir. 2017) (“We review the Commission’s claim construction determinations *de novo*

except for subsidiary facts based on extrinsic evidence, which we review for clear error.”).

B. Section 112, Para. 6 Applies

We conclude that the term “cheque standby unit” is subject to the application of § 112, para. 6. Means-plus-function claiming occurs when a claim term is drafted in a manner that invokes § 112, para. 6, which states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (2006). As this court stated *en banc* in *Williamson*, Congress, in enacting this provision, “struck a balance in allowing patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function,” while “placing specific constraints on how such a limitation is to be construed”—that is, by restricting the “scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” 792 F.3d at 1347.

The standard by which we determine whether § 112, para. 6 applies “is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Id.* at 1349 (citing *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996)). As a procedural matter, to determine whether § 112, para. 6 applies to a claim limitation, we first look to whether the limitation uses the word “means.” If so, there is a rebuttable presumption that § 112, para. 6 applies; if not, there is a

rebuttable presumption that the provision does not apply. *Id.* at 1348–49. Where, as here, a claim term lacks the word “means,” the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to “recite sufficiently definite structure” or else recites “function without reciting sufficient structure for performing that function.” *Id.* at 1349 (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

Diebold has shown that the term “cheque standby unit,” as understood by one of ordinary skill in the art, both fails to recite sufficiently definite structure and recites a function without reciting sufficient structure for performing that function. Examining the evidence intrinsic to the ’235 patent, we observe that the claims do not recite *any* structure, much less “sufficiently definite structure,” for the “cheque standby unit.” Rather, the claims describe the term “cheque standby unit” solely in relation to its function and location in the apparatus. Claim 1 specifies that the unit must be “placed in the main transfer path between the first gate and the second gate” and requires that it be “configured to hold the at least one authentic cheque to return the at least one authentic cheque to the user responsive to receiving user instructions cancelling depositing of the at least one authentic cheque.” ’235 patent, col. 10, ll. 50–55. None of the dependent claims add limitations that either describe particular structural features or flesh out whether the term has a particular structural meaning. And the specification similarly explains that the “cheque temporary standby unit” is “formed on the main transfer path **106a**” and is used to “temporarily stop[] a transfer of authentic cheques,” without making clear what, if any, structures correspond to the claim term. *Id.* col. 2, l. 62–col. 3, l. 2. Indeed, although the specification includes a drawing, Figure 2, which purports to illustrate the term, it depicts “cheque temporary standby unit **120**” as a vertical line

indistinguishable from the “main transfer path **106a**” that both precedes and follows it and on which it is “formed.” *Id.* at Fig. 2.

Although these passages suggest that the “cheque standby unit” must have *some* structure to perform the function of holding checks and then either returning them to the user or continuing to process them pending a user instruction, the ’235 patent does not offer any clues as to what such a structure might be.³ Indeed, the written description does not include any examples of what structures or class of structures fall within the definition of a “cheque standby unit.” Nor does the fact the “cheque

³ At oral argument, counsel for the Commission for the first time mentioned a patent application incorporated by reference in the ’235 patent’s specification, arguing that element 114 of this incorporated patent application, referred to as a “temporary standby unit,” shows a structure corresponding to the “cheque standby unit.” Oral Arg. at 18:14–19:33, *available at* <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2017-2553.mp3> (referencing J.A. 5585). Putting aside the question of waiver, counsel admitted that the section of the ’235 patent in which this application is incorporated is directed only to the invention’s tripartite sensors. *Id.* at 21:15–26. The extent to which material has been incorporated by reference into a host document is a question of law, *Advanced Display Systems, Inc. v. Kent State University*, 212 F.3d 1272, 1283 (Fed. Cir. 2000), and we conclude that the ’235 patent’s incorporation of this application expressly for its “detailed description” of two sensors is insufficient to incorporate the application for its “temporary standby unit,” ’235 patent, col. 5, ll. 3–6. Counsel admitted, moreover, that the Commission did not rely on this incorporated application, but relied instead on the testimony of Dr. Howard. Oral Arg. at 20:00–07.

standby unit” must be formed on the main transfer unit between the first and second gates offer any guidance “that might inform the structural character of the limitation-in-question or otherwise impart structure” to the term as recited in the claims, *Williamson*, 792 F.3d at 1351, particularly where the lone figure in which the unit is depicted illustrates no corresponding structure.

Our analysis of whether § 112, para. 6 applies does not end with this observation, however, as the Commission credited Dr. Howard’s expert testimony in determining that the term “cheque standby unit” connotes sufficiently definite meaning as the name for structure to persons of ordinary skill in the art. Diebold argues that, because this testimony was based purely on Dr. Howard’s interpretation of the intrinsic record, we should decline to consider it and review the Commission’s claim construction *de novo*. Diebold further argues that, even if the Commission was entitled to rely on Dr. Howard’s testimony, we should nevertheless reverse because he testified that the term “cheque standby unit” fails to connote any particular structure.

The Commission and Hyosung raise two arguments in response. First, they contend that, because Diebold failed to present affirmative evidence of how a person of ordinary skill would understand the claim language, Diebold failed to rebut the presumption against the application of § 112, para. 6. Second, they submit both that the Commission was entitled to credit Dr. Howard’s testimony, and that such testimony was sufficient to demonstrate that the term “cheque standby unit” had a structural meaning to persons of skill in the art at the relevant time. We reject both of the Commission and Hyosung’s arguments, and conclude that the term is subject to § 112, para. 6.

First, none of our cases mandate that a party seeking to overcome the presumption against application of § 112,

para. 6 can only do so by presenting extrinsic evidence that one of ordinary skill would *fail to* understand that a term connotes a definite structure. Imposing such a requirement would be inconsistent with the Supreme Court’s guidance in *Teva Pharmaceuticals*, where the Court held that, even in cases in which the district court finds a need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence, the district court must still conduct a legal analysis: “whether a skilled artisan would ascribe that same meaning to that term *in the context of the specific patent claim under review.*” 135 S. Ct. at 841. This is because “[e]xperts may be examined to explain terms of art, and the state of the art, at any given time,’ but they cannot be used to prove ‘the proper or legal construction of any instrument of writing.’” *Id.* (alteration in original) (quoting *Winans v. N.Y. & Erie R. Co.*, 21 How. 88, 100–01 (1859)). In short, trial courts, after deciding factual disputes, must interpret patent claims in light of the facts that they found—“[t]his ultimate interpretation is a legal conclusion,” and “appellate court[s] can still review the [tribunal’s] ultimate construction of the claim de novo.” *Id.* We specifically applied *Teva*’s holding in the context of § 112, para. 6 in *Skky, Inc. v. MindGeek, s.a.r.l.*, 859 F.3d 1014 (Fed. Cir. 2017), explaining that “[t]he task of determining whether the relevant claim language contains a means-plus-function limitation is . . . a question of law that we review de novo.” *Id.* at 1019 (alteration in original) (quoting *TriMed, Inc. v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008)).

Thus, in appropriate cases, a party advocating that a claim limitation that does not recite the word “means” is subject to § 112, para. 6 can overcome the presumption against its application solely by reference to evidence intrinsic to the patent. Diebold’s failure to contradict Dr. Howard’s testimony with extrinsic evidence is not fatal to its ability to overcome the presumption, as the Commission and Hyosung argue, unless we conclude that Dr.

Howard's testimony was sufficient to overcome conclusions drawn from the intrinsic record. We conclude it was not.

The Commission relied on paragraphs 185, 186, and 189 of Dr. Howard's Witness Statement in determining that the term "cheque standby unit" is not a means-plus-function term. It did not cite, and Hyosung did not introduce, any other evidence, such as dictionary definitions, suggesting that "cheque standby unit" is a term commonly understood by persons of ordinary skill in the art to denote a device or class of devices. *Cf. Greenberg*, 91 F.3d at 1583 (relying on dictionary definitions that "make clear that the noun 'detent' denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms," and explaining that what matters is whether "the term, as the name for structure, has a reasonably well understood meaning in the art"). But, even crediting the entirety of Dr. Howard's testimony, we conclude, as a matter of law, that the term "cheque standby unit" is subject to the application of § 112, para. 6.

The Commission relied on Dr. Howard's testimony that "a person of ordinary skill in the art would readily understand that a structure in an ATM that temporarily holds checks pending the customer confirming the deposit is the cheque standby unit," and that, "[i]n general, a cheque standby unit is the escrow that temporarily holds checks." J.A. 3219 ¶ 186. It also relied on his testimony that the term "would necessarily have a structural meaning" to a person of ordinary skill in the art, who would understand the unit must be "comprised of well-known components for holding cheques in a standby configuration pending user confirmation of the deposit," and must "interface with the main transfer path." J.A. 3219–20 ¶ 189. And it credited his testimony that "[a] person of ordinary skill in the art would also understand the stack-

ing and temporary storage of media in figure 2” of the ’235 patent in a different portion of its ID. J.A. 3222 ¶ 192.

None of these findings demonstrate that the term “cheque standby unit” had a reasonably well understood meaning in the art at the time of the invention. *Greenberg*, 91 F.3d at 1583. Adopting the approach taken by the inventors of the ’235 patent, Dr. Howard offered purely functional definitions of the term “cheque standby unit.” Nowhere in his testimony does he explain with any degree of definiteness what structure or class of structures a person of ordinary skill would understand the term to encompass. He did not define an “escrow,” did not explain what “well-known components” a skilled artisan would understand could be used to design a “cheque standby unit,” and did not articulate how the fact that the “cheque standby unit” must “interface with the main transfer path” dictates any aspect of the unit’s structure.⁴

⁴ At oral argument, counsel for Hyosung argued that Dr. Howard’s oral testimony that “escrow units” were “well known” demonstrates that persons of ordinary skill in the art knew the equivalent term “cheque standby unit” is a sufficiently definite name for structure. *See* J.A. 1631:12–20. He invited the court to “Google ATM escrow unit” to see that the term has a specific, structural meaning to persons of ordinary skill, akin to words like “brake,” “lock,” and “screwdriver.” Oral Arg. at 26:00–26:13. Hyosung did not present any such evidence to the Commission, however, nor did the Commission find that the term “escrow unit” conveys a particular structural meaning to skilled artisans. Counsel for Hyosung also expressly declined to conclude that the scope of the term “cheque standby unit” is limited to structures falling in the purportedly well-understood group of structures known as “escrow units.” *Id.* at 26:13–26:24. And, counsel presented no evidence or argument indicating that the “escrow

He likewise failed to offer any structural limitation that might serve to cabin the scope of the functional term. In essence, Dr. Howard did little more than opine that a skilled artisan would understand the functional term “cheque standby unit” to be *any* structure capable of performing the claimed function.⁵ Hyosung offered no other extrinsic evidence to demonstrate that the term “cheque standby unit” has a sufficiently definite structural meaning to persons of ordinary skill in the art, and the Commission made no such fact-findings.

This case is therefore distinguishable from the cases on which the Commission and Hyosung rely. First, in *Inventio AG v. Thyssenkrupp Elevator Americas Corp.*, 649 F.3d 1350 (Fed. Cir. 2011), *overruled on other grounds by Williamson*, 792 F.3d at 1339, we found that the written descriptions of the patents “indicate[d] that the ‘computing unit’ connotes structure to skilled artisans” by expressly referring to the computing unit as “a commercially available personal computer or workstation” and by noting that the term includes “at least one processor and at least one data memory.” *Id.* at 1359–60. Here, by contrast, the specification does not describe what an exemplary “cheque standby unit” might be, nor does it describe a class of structures to which the “cheque standby unit” belongs.

units” to which he referred either existed or were well known as of the date of the application for the ’235 patent. For these reasons, we do not countenance Hyosung’s arguments concerning “escrow units.”

⁵ As noted, during trial before the Commission, Dr. Howard testified that, in his opinion, the phrase “cheque standby unit” was broad enough to cover structures as distinct as a suction cup, a trapdoor, and a drum, without limitation.

In *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364 (Fed. Cir. 2003), we considered whether claim limitations reciting “circuits” were subject to § 112, ¶ 6. We began by noting that the term “circuit,” which one dictionary defines as “the combination of a number of electrical devices and conductors that, when interconnected to form a conducting path, fulfill some desired function,” “by itself connotes some structure,” and explained that “the term ‘circuit’ with an appropriate identifier such as ‘interface,’ ‘programming’ and ‘logic,’ certainly identifies some structural meaning to one of ordinary skill in the art.” *Id.* at 1373. We then observed that nothing in the specification or prosecution history was inconsistent with the ordinary meaning of the term “circuit,” and pointed out that the Raritan’s experts’ testimony “show[ed] only that the term ‘circuit’ is understood by one of ordinary skill in the art as a very broad term and that one of the accused products included several of the circuit elements.” *Id.* at 1373–74. Here, however, the word “unit,” which the ’235 patent uses to describe thirteen distinct components of the invention, does not, standing alone, connote any particular structure. Nor is sufficient structure imparted by modifying the word “unit” with the words “cheque” and “standby” or by specifying the location of the “cheque standby unit.” The ’235 patent offers no guidance as to what structure or class of structures “placed in the main transfer path” might be capable of performing the function of holding checks pending user instructions.

Finally, in *Greenberg*, we were tasked with deciding whether the term “detent mechanism” was subject to § 112, para. 6. The district court concluded that it was, both because the term did not describe a particular structure but instead described any structure that performed a detent function, and because both the dictionary definition of the word “detent” and the definition of “detent mechanism” offered by Dr. Greenberg’s expert “were expressed in functional terms.” 91 F.3d at 1583. We

disagreed. First, we recognized that “[m]any devices take their names from the functions they perform,” including “filter,” “brake,” and “clamp,” and concluded that “detent” is “just such a term.” *Id.* We explained that dictionary definitions “make clear that the noun ‘detent’ denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms.” *Id.* And although “the term ‘detent’ does not call to mind a single well-defined structure,” we observed that “the same could be said of other commonplace structural terms such as ‘clamp’ or ‘container.’” *Id.* “What is important is not simply that a ‘detent’ or ‘detent mechanism’ is defined in terms of what it does, but that the term, as the name for structure, has a reasonably well understood meaning in the art.” *Id.*

This case is unlike *Greenberg*, as there is no evidence—in the form of dictionary definitions or otherwise—that “cheque standby unit” was reasonably well understood by persons of ordinary skill in the art to refer to a structure or class of structures. *See Skky*, 859 F.3d at 1019 (stating that a limitation may recite sufficiently definite structure “even if the term covers a broad class of structures and even if the term identifies the structures by their function” (quoting *TecSec, Inc. v. Int’l Bus. Machs. Corp.*, 731 F.3d 1336, 1347 (Fed. Cir. 2013))). All the record contains is one expert’s unsupported, and largely unhelpful, opinion that skilled artisans would have understood that a “cheque standby unit” has a particular function and can be made of “well-known components for holding cheques in a standby configuration pending user confirmation of the deposit.”

Instead, we find this case to be analogous to *Advanced Ground Information Systems, Inc. v. Life360, Inc.*, 830 F.3d 1341 (Fed. Cir. 2016), which concerned the term “symbol generator.” There, we held that the term “symbol generator” invokes the application of § 112, para. 6 because “it fails to describe a sufficient structure and other-

wise recites abstract elements ‘for’ causing actions,” or “elements ‘that can’ perform functions.” *Id.* at 1347–48. In relevant part, we rejected the patentee’s argument that its expert presented un rebutted testimony that those skilled in the art would have understood what a “symbol generator” is, and would have known how to select and use one from the well-known class of software modules, for two reasons. First, we observed that the expert “testified that the term ‘symbol generator’ is a term coined for the purposes of the patents-in-suit.” *Id.* at 1348. Second, we pointed out that there was no evidence that the term was “used in ‘common parlance or by persons of skill in the pertinent art to designate structure,’ such that it connotes sufficient structure to avoid the application of” § 112, para. 6. *Id.* (quoting *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1359 (Fed. Cir. 2004), *overruled on other grounds by Williamson*, 792 F.3d at 1348–49). Here, too, neither the Commission nor Hyosung point to documentary evidence that the term “cheque standby unit” was used either in “common parlance” or by skilled artisans in the pertinent field to designate structure. *Id.* Nor do they dispute Diebold’s contention that the term, which was added to the claims during prosecution, was “coined by the applicant himself for purposes of claiming his invention.” Appellant Br. 31.

C. The Specification Does Not Disclose
Sufficient Structure Corresponding
to the Claimed Function

Having concluded that the term “cheque standby unit” is subject to application of § 112, para. 6, we next determine whether the specification discloses sufficient structure that corresponds to the claimed function, which the parties do not dispute is “holding the at least one authentic cheque to return the at least one authentic cheque to the user responsive to receiving user instructions canceling depositing of the at least one authentic cheque.” It does not.

“Structure disclosed in the specification qualifies as ‘corresponding structure’ if the intrinsic evidence clearly links or associates that structure to the function recited in the claim.” *Williamson*, 792 F.3d at 1352 (citing *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012)). “Even if the specification discloses corresponding structure, the disclosure must be of ‘adequate’ corresponding structure to achieve the claimed function.” *Id.* (citation omitted). Thus, under § 112, paras. 2 and 6, if a person of ordinary skill in the art would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim, a means-plus-function clause is indefinite. *Id.* (citation omitted).

Although the Commission found that “[f]igure 2 of the ’235 patent teaches a cheque standby unit **120** that temporarily stores at least one authentic cheque by holding it in position on the belt,” J.A. 142, no structure is disclosed in the figure or written description that is capable of performing this function. Instead, all that is depicted in the figure for item **120** is a pair of vertical lines that wraps around the outside of two cylinders. These lines are indistinguishable from main transfer unit **106a**, which both precedes and follows item **120**. The corresponding portions of the written description likewise do not describe any structure capable of “holding [cheques] in position on the belt.” Nor does the written description—including the portions cited by the Commission—reference “the stacking and temporary storage of media.” *Cf.* J.A. 142. Even had the specification included this phrase, it would still describe only function, not structure, and therefore would be insufficient to constitute “‘adequate’ corresponding structure to achieve the claimed function.” *Williamson*, 792 F.3d at 1352.

Because the ’235 patent fails to disclose any structure corresponding to the function of “holding the at least one authentic cheque to return the at least one authentic cheque to the user responsive to receiving user instruc-

tions cancelling depositing of the at least one authentic cheque,” we conclude that claims 1–3, 6, 8, and 9 are invalid for indefiniteness under 35 U.S.C. § 112, para. 2.

III. CONCLUSION

For the foregoing reasons, we reverse the Commission’s finding that Diebold violated § 337.

REVERSED

COSTS

Costs to appellant.