

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

**Before the Honorable Monica Bhattacharyya
Administrative Law Judge**

In the Matter of

CERTAIN MOBILE ELECTRONIC DEVICES

Inv. No. 337-TA-1324

COMPLAINANT MAXELL LTD.'S INITIAL *MARKMAN* BRIEF

limitations. In fact, when the events of the entire prosecution history are considered in totality, it is clear that Applicant cancelled the additional claims in view of the rejection to the reissue declaration and in an attempt to get the remaining claims allowed in an expedited manner. Applicant even added “a finger of a user,” to these remaining claims. But to disavow or disclaim the full scope of a claim term, the patentee’s statements in the specification or prosecution history must amount to a “clear and unmistakable” surrender. *See Cordis Corp.*, 561 F.3d at 1329. And “[w]here an applicant’s statements are amenable to multiple reasonable interpretations, they **cannot be deemed clear and unmistakable.**” *3M Innovative Props. Co.*, 725 F.3d at 1326 (emphasis added).

Thus, Lenovo’s proposed constructions should be rejected and Maxell and Staff’s proposed constructions—which are consistent with the plain and ordinary meaning of the claim terms—should be accepted.

Term 4: “second controller configured to execute a specified process when said first information and said second information are coincident within said identification mode” (’086 Patent, claim 1)

Maxell’s Proposed Constructions	The Staff’s Proposed Construction	Lenovo’s Proposed Construction
Plain and ordinary meaning, i.e., a second controller that can execute a specified process when said first information and said second information are coincident within said identification mode	Subject to § 112 ¶ 6. Second Controller Function: execute a specified process when said first information and said second information are coincident within said identification mode Second Controller Structure: a control unit 3 (as shown in Fig. 2 and described at col. 3:26-30) that includes an	Subject to §112 ¶ 6. Second Controller Function: execute a specified process when said first information and said second information are coincident within said identification mode. Second Controller Structure: no corresponding structure disclosed, rendering the term indefinite.

Maxell's Proposed Constructions	The Staff's Proposed Construction	Lenovo's Proposed Construction
	arithmetic section, a counter, a determination unit, and a storage unit; and is configured to execute a specified process assigned to a matching registered password as shown in Fig. 12B and described at col. 7:38-48; and equivalents thereof.	

For this term, Lenovo and Staff invoke Section 112 ¶ 6. But Section 112 ¶ 6 presumptively does not apply to a claim term that does not use “means.” *Williamson*, 792 F.3d at 1349. The presumption is rebuttable if a party can “demonstrate[] that the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* (quoting *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)). Here, Lenovo will not be able to demonstrate that “second controller . . .” “fails to recite sufficiently definite structure” or else “recites function without reciting sufficient structure for performing that function” so as to overcome this presumption. *See Williamson*, 792 F.3d at 1351 (quotations omitted). This is because by reciting that the second controller executes “a specified process when said first information and said second information are coincident,” the claim itself shows that this term has sufficiently definite structure corresponding to a known structure and should be construed consistent with its plain and ordinary meaning as proposed by Maxell.

Specifically, Dr. Wobbrock explains that the term “second controller” connotes sufficiently definite structure because “‘controller’ is well understood in electrical and computer engineering contexts to connote a variety of structures for performing particular tasks.” Wobbrock Decl. at ¶¶

64-65. In particular, a person of ordinary skill in the art would understand that the claimed “second controller” can perform the material act of executing a specified process by using a processor (*e.g.*, CPU) that is typically included in the known structures of a controller. *Id.* at ¶ 65. For example, “a POSITA would recognize that one example of a known structure corresponding to the claimed ‘controller’ would be a microcontroller” that can “perform[] the material act” “of executing a specified process by using a processor (*e.g.*, CPU) typically included in” such known structures. *Id.* at ¶¶ 50-51. Dr. Wobbrock’s opinions are amply supported by extrinsic and intrinsic evidence.

For example, Dr. Wobbrock relies on a text book entitled “Microcontrollers” that describes the basic architecture of the known structure of a microcontroller. *See* Wobbrock Decl. at ¶¶ 51-63 (citing Valdes-Perez, F.E. and Pallas-Areny, R. (2009), *Microcontrollers: Fundamentals and Applications with PIC* (“Ex. 11”)). This textbook explains that “[m]icrocontrollers combine the fundamental resources available in a microcomputer such as the CPU, memory, and I/O resources” and that “the CPU is the brain of the microcontroller . . . [that] fetches the program instructions from their locations in memory one by one, interprets or decodes them, and executes them. The CPU also “includes the **ALU circuits** for binary **arithmetic and logic operations.**” *See* Ex. 11 at 3 (emphasis added); *see also id.* at 4 (showing a block diagram of an example of a known structure of a controller that is excerpted below:



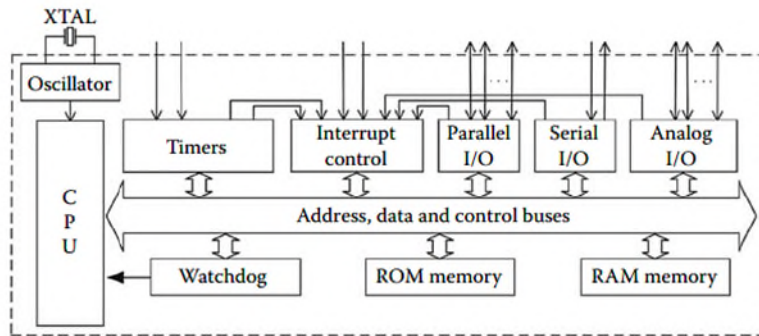


FIGURE 1.2
Basic block diagram of a microcontroller.

This plain and ordinary meaning of the known structure of a microcontroller matches exactly with the description of “control unit 3,” as provided in the ’086 Patent, thus confirming that Maxell’s proposed construction of plain and ordinary meaning is correct because the inventors did not invoke Section 112 ¶ 6. In particular, the ’086 Patent discloses that “[t]he control unit 3 includes an arithmetic section, a counter, a determination unit which determines condition in accordance with input information into the control unit 3, and a storage unit which stores various types of data.” ’086 Patent at 3:26-30. This disclosure is that of a known structure, *i.e.*, microcontroller (control unit 3) that includes a CPU (*e.g.*, one or more of arithmetic section, counter, and/or determination unit) for performing “arithmetic and logic operations.” See Wobbrock Decl. at ¶¶ 53-55 (comparing the disclosures of Ex. 11 with those of the ’086 Patent and explaining how the disclosed arithmetic section, counter, determination unit, and/or storage unit in control unit 3 of the ’086 Patent correspond to the CPU having arithmetic logic unit (ALUs) circuits, program counter (PC), and memory described in the known structure of microcontrollers).

As an additional example of the one-to-one correspondence between the known structure of microcontroller and the disclosed control unit in the ’086 Patent, Dr. Wobbrock explains that “just like the textbook discloses that the known structure of a microcontroller includes a ‘CPU [that] fetches the program instructions from their locations in memory . . . and executes them,’

the '086 Patent discloses that the control unit 3 ‘performs **particular processing** when the determination unit determines that the identification information detected by the detection unit matches the reference identification information.’” Wobbrock Decl. at ¶ 54. In addition, the textbook identified over forty-five examples of known “controllers” at the time of the '086 Patent that were commercially available and could be used to perform the material act of executing a specified process when the claimed condition is met. *See* Ex. 11 at 12-14; *see also* Wobbrock Decl. at ¶ 56.

Thus, it is clear that the claimed language of “second controller configured to execute a specified process when said first information and said second information are coincident” is **not** invoking § 112 ¶ 6, but is simply reciting the known structure, and therefore no construction is necessary and the term should be given its plain and ordinary meaning.

Moreover, while the above evidence is sufficient to demonstrate that the claim limitation does not invoke § 112 ¶ 6 but recites a known structure, the intrinsic evidence also provides additional support for Maxell’s proposed construction. In particular, the '086 Patent describes a control unit that performs various functions for the portable terminal, consistent with the plain and ordinary meaning of the term controller. Wobbrock Decl. at ¶¶ 58-59 (citing '086 Patent at 3:24-26, 3:63-4:5, 4:15-20, 4:30-34, 4:42-51, 4:52-60, 5:28-38, 5:54-57, 6:32-50, 6:55-7:4, 7:13-37 (explaining how the control unit acts as a known structure to perform “various operations by controlling the touch panel, starting a program, unlocking the portable terminal, controlling the display and memory by performing display and memory tasks, and/or performing various calculations and determinations.”)).

Even, the file history of the '086 Patent also demonstrates that Patentee did not invoke § 112 ¶ 6 when reciting the claimed second controller. For example, Maxell explicitly canceled

“unit” claims during prosecution of the ’086 Patent and replaced them with non-MPF terms. *See* Excerpts from the File History of the ’086 Patent (Ex. 22) including original claims filed on January 14, 2014 that were canceled and replaced with non-unit claims on August 8, 2014:

Original Claims in the ’086 Patent FH	Issued Claims in the ’086 Patent FH
1. (Original) An information processing apparatus comprising: a touch panel which displays a plurality of pieces of identification information and detecting a contact of the panel with an object of interest; a detection unit, when the touch panel detects a contact with the object, which specifies identification information indicated by a position at which the contact in question occurred, of the multiple pieces of identification information displayed on the panel, and which detects an area of part where the contact occurred; a storage unit which stores reference identification information and a reference area range; a determination unit which determines whether the identification information detected by the detection unit matches the reference identification information stored in the storage unit and whether the area of the contact detected by the detection unit falls within the reference area range stored in the storage unit; and a control unit which performs particular processing on condition the determination unit determines that the identification information detected by the detection unit matches the reference identification information stored in the storage unit and the area of the contact detected by the detection unit falls within the reference area range stored in the storage unit.	8. (New) An information processing apparatus comprising: a touch panel configured to detect a contact of a finger of a user; a detector configured to detect first information necessary for an identification of the user when the contact is detected between the touch panel and the finger of the user; a first controller configured to control the information processing apparatus to operate into two operating modes: at least an identification mode and a registering mode, as the operating mode thereof; memory that is configured to store second information relating to the identification of the user, which is stored in advance; and a second controller configured to execute a specified process when said first information and said second information are coincident within said registering mode, wherein: in said registering mode, there are provided a first registering mode for inputting input information by a pad of the finger, and a second registering mode for inputting input information by an end of the finger, and said second information relating to the identification of the user is produced upon basis of the input information, which is inputted at least in the first or second mode.

Similarly, the claims of the parent of the ’086 Patent recite “unit” terms. *See* U.S. Patent No. 8,654,093 (Ex. 21) (now RE48830E1) at claim 1 (reciting “storage unit,” “detection unit,” “control unit,” and “determination unit.”) Thus, Maxell made it explicitly clear during the prosecution of the ’086 Patent that it was not invoking § 112 ¶ 6 by canceling claims directed to “control unit” and replacing the claims with claims reciting known structures, such as “controller.”

Further, prior art references that are part of the intrinsic evidence also confirm that a person of ordinary skill in the art would recognize that the claimed “controller” is a known structure. *See* Wobbrock Decl. at ¶¶ 60-62 (citing Exs. 12-14 to demonstrate that multiple pieces of intrinsic evidence consistently and repeatedly disclosed “controller” as a known structure similar to the claimed second controller and control unit disclosed in the ’086 Patent).

Even definitions provided in numerous technical dictionaries support Maxell’s position that the term “controller” is a known structure:

- “A device that coordinates and controls the operation of one or more input/output devices, such as workstations, and synchronizes the operation of such devices with the operation of the system as a whole.” IBM Dictionary of Computing (1994) (Ex. 16) at 145.
- “A device that other devices rely on for access to a computer subsystem.” Microsoft Computer Dictionary, Fifth Edition (2002) (Ex. 17) at 128.
- “A unit that directs the operation of a subsystem within a computer.” Comprehensive Dictionary of Electrical Engineering, Second Edition (2005) (Ex. 18) at 148.
- “In computer hardware, a processing component that manages the flow of data between the computer and peripheral devices.” The Dictionary of Multimedia Terms & Acronyms, Fourth Edition (2005) (Ex. 19) at 94.
- “A circuit board or device which controls the way peripheral devices access the computer, and vice versa. It is usually contained on a single chip. Examples include disk controllers, graphic controllers, and video controllers.” Wiley Electrical and Electronics Engineering Dictionary (2004) (Ex. 20) at 145.

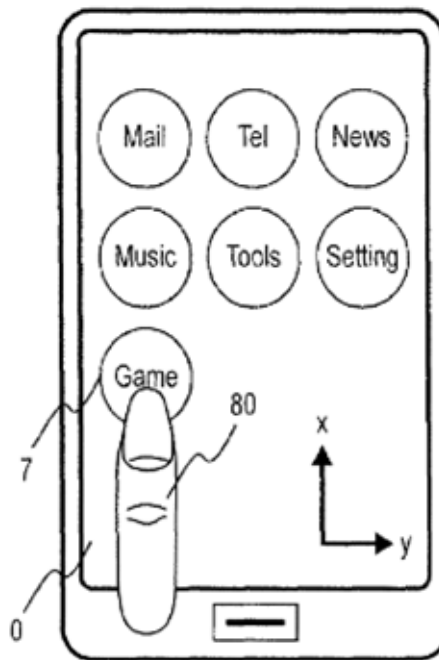
See also Wobbrock Decl. at ¶ 65 (explaining same).

Further, it is clear from the claim language itself that the terms are used consistent with their plain and ordinary meaning. For example, the second controller “execute[s] a specified process when said first information and said second information are coincident.” ’086 Patent, claim 1. In other words, the claim itself shows that this term has sufficiently definite structure. *See Free Stream Media Corp. v. Alphonso Inc.*, No. 2:15-cv-1725-RWS, 2017 WL 1165578, at *25 (E.D. Tex. Mar. 29, 2017) (declining to construe “client device” as an MPF term because “the claims themselves connote sufficiently definite structure by describing how the ‘client device’ operates within the claimed invention to achieve its objectives”); *see also Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 704 (Fed. Cir. 1998) (“where a claim recites a function, but then goes on to elaborate sufficient structure, material, or acts within the claim itself to perform entirely the recited function, the claim is **not in means-plus-function format** even if the claim uses the term means”).

Maxell’s proposed construction is also supported by prior court decisions that have consistently held that the term “controller” denotes sufficiently definite structure. *See e.g., Sound View Innovations, LLC v. Facebook, Inc.*, No. 16-cv-116 (RGA), 2017 WL 2221177, at *5 (D. Del. May 19, 2017) (“‘Controller’ may be a class of structures, rather than one specific structure, and may be defined with functional terms, but that does not make it means-plus-function.”); *see also Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp.*, 264 F. Supp. 2d 135, 153 (D. Del. 2003) (“controller” is not an MPF term); *911EP v. Whelen Eng’g Co., Inc.*, 512 F. Supp. 2d 713, 727 (E.D. Tex. 2007) (“[t]he claim language does not merely describe a controller, but adds further structure by describing the operation of the controller. ... Accordingly, the description of the operation of a controller is sufficient to avoid section 112 P 6.”); *see also SynQor, Inc. v. Artesyn Techs., Inc.*, No. 2:07-CV-497-TJW-CE, 2010 WL 2991037, at *23 (E.D. Tex. Jul. 26, 2010), *aff’d*, 709 F.3d 1365 (Fed. Cir. 2013) (finding that “control circuitry determining ...” is not an MPF term); *Maxell Ltd. v. Huawei Device USA Inc.*, 297 F. Supp. 3d 668, 748 (E.D. Tex. 2018) (“‘controller’ connotes structure [and] does not fall with the means-plus-function analysis”); *Certain LED Lighting Devices, LED Power Supplies, and Components Thereof*, Inv. No. 337-TA-1081, Order No. 49 at 46 (even then finding that “controller recited in claim 17” is not a MPF term).

Despite the overwhelming and consistent support in extrinsic evidence, intrinsic evidence, and prior decisions that controller is a known structure, Lenovo continues to seek a construction to further its invalidity argument and escape liability from a patent it already licensed for its laptop products. Opinions provided by Respondents’ expert also are not convincing. To the contrary, Respondents’ expert admits that “[a] person of ordinary skill in the art would know that the ‘controllers’ discussed in these references differ from each other and would understand their

structures only through contextual information.” Nielson Decl. ¶ 45 (Ex. 25). Respondents’ expert, however, contends that this context is not present in the ’086 Patent. This is incorrect. According to the ’086 Patent, the claimed “second controller” is included in an “information processing apparatus,” which is clearly and repeatedly disclosed in the ’086 Patent as a portable terminal, such as a smartphone executing multiple applications:



’086 Patent, at Figs. 4A, 4B, 7A-7C (excerpted above), 10A-11C

If this context was not enough, the ’086 Patent provides even further context by explaining that the second controller could be implemented as a “control unit” that “includes an arithmetic section, a counter, a determination unit . . . , and a storage unit.” ’086 Patent at 3:26-30. And as explained by Dr. Wobbrock, this context is sufficient for a person of ordinary skill in the art to realize that this claimed “second controller” corresponds to the well-known structure of a microcontroller that includes a CPU (*e.g.*, one or more of arithmetic section, counter, and/or determination unit) for performing “arithmetic and logic operations.” See Wobbrock Decl. at ¶¶

53-54 (comparing the disclosures of Ex. 11 with those of the '086 Patent).

Respondents' expert also argues that there is insufficient structure because the '086 Patent only discloses a single "control unit" but the claim discloses two controllers. Nielson Decl. ¶¶48-50. As admitted by Dr. Nielson, however, a controller may have "different configurations of hardware and software." Nielson Decl. ¶45 (Ex. 25). Thus, a person of ordinary skill in the art would recognize that control unit 3 could have a first configuration "to control the information processing apparatus to operate into two operating modes" and a second configuration "to execute a specified process." There is nothing in the specification of the '086 Patent that puts any physical limitations on the "control unit" that would preclude it from providing corresponding structure for both the claimed first and second controllers. In particular, control unit 3 could include multiple cores or processors, such as the ones included in the ARM7, ARM9, and/or ARM11 controllers identified by Dr. Wobbrock from the textbook of controllers. See Wobbrock Decl. at ¶ 56 (citing Ex. 11).

Respondents' expert also contends that by cancelling the claims reciting "control unit" and adding new claims with first and second controllers, the Patentee was somehow requiring that the first and second controllers "refer to different structures from one another." Nielson Decl. ¶ 50 (Ex. 25). This, however, is a mischaracterization of the file history of the '086 Patent. Patentee made no such statement of requiring first and second controller to be different structures or different hardware components. In fact, as noted above, the file history of the '086 Patent supports Maxell's position because it demonstrates that Patentee was replacing MPF ("unit") claim terms with non-MPF claim terms. In addition, the file history of the '086 Patent includes no disclaimer supporting the position that the claims were amended to distinguish from a single controller prior art system and requiring a two controller system that must requires two different structures. In

contrast, Patentee simply stated that “the claimed subject matter differs from the reference of record, Sakurai et al. (US Patent Pub. No. 2005/0162407), in particular, at least in an aspect that the subject matter comprises the followings: *i.e.*, the memory and the first and the second controllers.” See Ex. 9 to Nielson Decl. This statement makes no mention of requiring separate or differing structures for the two claimed controllers and “the standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature.” See *Poly-Am., L.P.*, 839 F. 3d at 1136. Thus, each of Respondents’ expert arguments are unsupported and do not rise to the level of “clear and convincing” in order to justify the invalidating of claim 1 of the ’086 Patent.

Put simply, Lenovo is overreaching here and its proposal should be rejected. The only proposed construction that is overwhelmingly supported by evidence and the law is that proposed by Maxell, and it should therefore be adopted.

C. The ’394 Patent

1. Technical Background of the ’394 Patent

With the rise of digital media, multimedia players saw a sharp expansion in their capabilities. Beyond simply being able to pause, rewind, and fast forward digital content, conventional apparatuses around 2005 also provided a host of other features for the selection and control of digital content.

However, with these ever-expanding features also came ever-expanding control panels, typically in the form of graphical user interfaces (GUIs). New features meant the introduction of new keys or buttons to control those features, which in turn lead to increasingly cluttered GUIs. These expanding GUIs often required larger screens or the partial or complete overlay of whatever digital content happened to be playing at the time.