



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/178,061	06/09/2016	Jean-Paul Edmond Rans	16754-000114-US-CPA	7203
120493	7590	06/04/2020	EXAMINER	
Harness Dickey (Mastercard) 7700 Bonhomme Suite 400 St. Louis, MO 63105			GETACHEW, WODAJO	
			ART UNIT	PAPER NUMBER
			3685	
			NOTIFICATION DATE	DELIVERY MODE
			06/04/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gwmefile@hdp.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JEAN-PAUL EDMOND RANS and SUMEET BHATT

Appeal 2020-000512
Application 15/178,061
Technology Center 3600

Before JEFFREY S. SMITH, MELISSA A. HAAPALA, and
AMBER L. HAGY, *Administrative Patent Judges*.

HAGY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner’s decision to reject claims 23–26 and 29–35, which are all of the pending claims.² *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as the applicant, Mastercard International Inc. Appeal Br. 3.

² Per Appellant, “[c]laims 1–6 and 22–35 were pending in the current application, of which [c]laims 1–6, 22, and 27–28 were withdrawn.” Appeal Br. 5. Claims 7–21 were previously canceled. Appeal Br. 34 (Claims App.); Final Act. 2.

CLAIMED SUBJECT MATTER

Appellant’s Specification describes “systems and methods for verifying users based on biometrics, in connection with transactions using payment devices, prior to, for example, authorizing the transactions, distributing benefits associated with the transactions to the users (e.g., products, payments, etc.), etc.” Spec. ¶ 2. By way of background, the Specification describes payment account cards that are used in financial transactions, such as for purchase of goods or services, for transfers of funds into and out of bank accounts, and for social assistance. *Id.* ¶ 4. Such cards typically are associated with “a variety of card verification methods” that are used “to ensure that the users of the payment account cards are, in fact, authorized to use them.” *Id.*

The Specification purports to describe and claim an improvement in payment card verification, in which the payment cards “incorporate security chips (e.g., EMV³ chips, etc.) with biometric sensors (e.g., fingerprint sensors, etc.).” *Id.* ¶ 14. “The security chips acts to verify the users, if possible, by use of the biometric sensors and then, if verified, interact with terminals . . . to provide transactions, through which the verifications are confirmed, to the issuers of the payment accounts.” *Id.*

Claim 23, reproduced below, is the sole independent claim, and illustrates the claimed subject matter:

23. A system comprising a payment card device, wherein the payment card device is associated with a payment account and comprises:

a fingerprint sensor; and

³ “EMV” stands for “Europay®, Mastercard® and VISA®.” Spec. ¶ 33.

a security chip coupled to the fingerprint sensor and including a payment application and a verification application stored in the security chip;

wherein the security chip is configured to receive a select command from a terminal when the security chip is powered by the terminal;

wherein the security chip is further configured to invoke the payment application, in response to the select command, and wherein the security chip is configured, by the payment application, to invoke the verification application; and

wherein the security chip is configured, by the verification application, to:

initiate a timer;

capture a fingerprint image, at the fingerprint sensor, when the timer is unexpired;

validate the captured fingerprint image against reference fingerprint data in the payment card device;

when the timer expires, without a match to the reference fingerprint data, return a first authentication file location (AFL) to the terminal; and

when a match between the captured fingerprint image and the reference fingerprint data is found, while the timer is unexpired, return a second AFL to the terminal.

REFERENCE

The prior art relied upon by the Examiner is:

Bonalle et al. (“Bonalle”) US 2006/0000892 A1 Jan. 5, 2006

REJECTIONS⁴

Claims 23–26 and 29–35 stand rejected under 35 U.S.C. § 112(b) as being indefinite. Final Act. 5–6.

Claims 23–26 and 29–35 stand rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Bonalle. Final Act. 6–7.

OPINION

I. INDEFINITENESS REJECTION

The Examiner rejects claims 23–25, and 29–35 under 35 U.S.C. § 112(b) as “indefinite” on the ground that they are “directed to neither a ‘process’ nor a ‘machine’ but rather embrace or overlap two different statutory classes invention,” and thus are “hybrid claim[s].” Final Act. 5. In particular, as evidence that the claims are “drawn to a product,” the Examiner points to the preamble of independent claim 23, which recites “[a] system comprising a payment card device” and further points to the recitation in the claim of a “fingerprint sensor.” *Id.* The Examiner then states “[o]n the other hand, evidence to support a position that the claims are drawn to a process” includes the recitation in the claims of terms like “powered,” “selected,” “initiated,” etc. *Id.* The Examiner concludes that the claims recite both an apparatus and a method, and thus “do[] not sufficiently provide competitors with an accurate determination of the ‘metes and bounds’ of the protection involved.” *Id.* (citing *IPXL Holdings LLC v. Amazon.com Inc.*, 430 F.3d 1377 (Fed. Cir. 2005); *Ex parte Lyell*, 17

⁴ All rejections are under the provisions of Title 35 of the United States Code in effect after the effective date of the Leahy-Smith America Invents Act of 2011.

USPQ2d 1548 (BPAI 1990); *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303 (Fed. Cir. 2011)).

Appellant argues that the Examiner’s rejection is in error because the claims do not recite method steps but instead recite “permissible functional language” to “describe capabilities of the recited structure.” Appeal Br. 14. Appellant further argues that the cases cited by the Examiner are inapposite, and that the claims are instead analogous to the claims determined to use permissible functional language in *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307 (Fed. Cir. 2017). *Id.* at 13–14.

Appellant’s argument persuades us of Examiner error. We determine that the functional limitations in apparatus claim 23 (and similar recitations in the dependent claims) recite how components in the system (e.g., the security chip) are to be configured, rather than activities of a user. In that regard, we agree the claims are more analogous to those addressed in *MasterMine*. See *MasterMine* 874 F.3d at 1315–16; see also Appeal Br. 13–14; Reply Br. 9–10. In *MasterMine*, the Federal Circuit reversed the district court’s finding of indefiniteness of a system claim, which recited, *inter alia*, a “reporting module” that “receives from the user a selection . . . , and generates a database query,” reasoning that “the claims merely use permissible functional language to describe the capabilities of the claimed system, [and, therefore] it is clear that infringement occurs when one makes, uses, offers to sell, or sells the claimed system.” *Id.* at 1316. In so doing, the court expressly distinguished *IPXL Holdings*, which addressed a system claim reciting, *inter alia*, “the user uses the input means.” *Id.*

Here, claim 23 recites a system comprising a payment card device, further comprising “a security chip,” which is “configured to” perform

various functions, such as “to receive a select command from a terminal when the security chip is powered by the terminal,” as well as to “initiate a timer” and to “capture” and “return” certain data upon satisfaction of certain conditions. Although claim 23 includes verbs like “initiate,” “capture,” and “return,” such terms are used in the context of “configured to” clauses, and therefore represent permissible functional language used to describe the configuration of the security chip. *See MasterMine*, 874 F.3d at 1315–16 (“[T]he claims at issue here merely claim that the system ‘possess[es] the recited structure [which is] capable of performing the recited functions.’” (citation omitted)). The same is true of the dependent claims, which contain similar terminology and which the Examiner rejected on the same basis. *See* Final Act. 5–6; Appeal Br. 13–15; Reply Br. 9–10.

Accordingly, we do not sustain the Examiner’s rejection of claims 23–26 or 29–35 as indefinite under § 112(b).

II. ANTICIPATION REJECTION

The Examiner rejects claims 23–26 and 29–35 as anticipated by Bonalle. Final Act. 6–7. The Examiner does not, however, make findings that Bonalle discloses certain functionality recited in the claims that the Examiner determines “represents intended use/functional language and does not have patentable weight.” *Id.* at 7. For example, the Examiner makes no findings that Bonalle discloses “the security chip is configured . . . to” “initiate a timer,” “capture a fingerprint image,” “validate the captured fingerprint image,” “return a first authentication file location (AFL) to the terminal,” or “return a second AFL,” as recited in independent claim 23. *Id.* Rather, the Examiner concludes that, given its “broadest reasonable interpretation,” “the *security chip* is a processor,” and because “processors

or CPUs are programmable, the actions of ‘receive, invoke, initiate, validate and return’ . . . are inherent to these processors or CPUs.” *Id.* (citing “How Computers Work,” 7th ed, p.4). The Examiner then determines that Bonalle’s disclosure of a payment card device that comprises “a fingerprint sensor; and a security chip coupled to the fingerprint sensor and including a payment application and a verification application stored in the security chip; terminal and payment network computing device” is “sufficient in terms of art.” *Id.*

Appellant argues the Examiner’s rejection is in error because the limitations that the Examiner dismisses as merely statements of “intended use” are in fact structural limitations that are entitled to patentable weight. Appeal Br. 22. We agree.

It is well settled that when a claim recites an element that is “configured to” achieve a function, the claim requires that the specific element is not only “capable of” performing the recited function, but also is designed specifically to accomplish the function that is claimed. *See Aspex Eyewear, Inc. v. Marchan Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012) (indicating that claim language “configured to” is construed more narrowly than “capable of,” and requires that the structure must be “designed or configured to accomplish the specified objective, not simply that [it] can be made to serve that purpose”). Moreover, when functional language in a claim is associated with programming or some other structure required to perform the function, that programming or structure must be present in order to meet the claim limitation. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1380 (Fed. Cir. 2011) (discussing *Microprocessor Enhancement Corp. v. Texas Instruments, Inc.*, 520 F.3d

1367 (Fed. Cir. 2008)); *see also In re Noll*, 545 F.2d 141, 148 (CCPA 1976) (“[T]he claimed invention . . . comprises physical structure, including storage devices and electrical components uniquely configured to perform specified functions through the physical properties of electrical circuits to achieve controlled results. Appellant’s programmed machine is structurally different from a machine without that program.”).

Here, the “configured to” language recited in claim 23 imposes a structural limitation on the security chip in the claimed system and, therefore, is not simply a recitation of its intended use or mere capability. This is confirmed by reference to the Specification, which consistently describes the security chip as being specifically “configured to” perform the various recited functions, through “hardware, or firmware, or software in the form of executable instructions,” and not merely capable of being programmed to perform those functions. *See, e.g.*, Spec. ¶¶ 39–40.

For essentially the reasons argued by Appellant (Appeal Br. 19–27; Reply Br. 6–9), we agree that the Examiner has failed to find that Bonalle’s CPU is configured to perform the functionality that the security chip recited in claim 23 is required to perform.⁵ The Examiner finds that Bonalle’s CPU, being programmable, is *capable* of initiating a timer, capturing a fingerprint image, etc. (Final Act. 7), but the Examiner does not point to, nor do we discern, adequate disclosure in Bonalle that the CPU is *actually programmed* to, *inter alia*, “initiate a timer,” “when the timer expires, without a match to

⁵ Appellant’s contentions present additional issues. Because the identified issue is dispositive of Appellant’s arguments on appeal, we do not reach the additional issues.

the reference fingerprint data, return a first authentication file location (AFL) to the terminal,” or “when a match between the captured fingerprint image and the reference fingerprint data is found, while the timer is unexpired, return a second AFL to the terminal,” as required by the claims. Nor does the Examiner provide sufficient evidence or reasoning to support the finding that the recited functionality is “inherent” to Bonelle’s programmable CPU. *See* Final Act. 7.

For the foregoing reasons, we are persuaded of Examiner error in the anticipation rejection of claim 23 and we, therefore, do not sustain that rejection. The dependent claims stand with the independent claim.

CONCLUSION

The Examiner’s decision rejecting claims 23–26 and 29–35 under 35 U.S.C. § 112(b) is reversed.

The Examiner’s decision rejecting claims 23–26 and 29–35 under 35 U.S.C. § 102(a)(1) is reversed.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
23–26, 29–35	112(b) second paragraph	Indefinite		23–26, 29–35
23–26, 29–35	102(a)(1)	Bonalle		23–26, 29–35
Overall Outcome				23–26, 29–35

REVERSED