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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AARON SMITH

Appeal 2012-007631
Application 12/579,383
Technology Center 2400

Before ALLEN R. MacDONALD, LINDA E. HORNER, MICHAEL W. KIM, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

BENOIT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse. We also enter new grounds of rejection pursuant to our authority under 37 C.F.R. § 41.50(b).

Appellant's Invention

Appellant's invention is directed to updating user reviews of a product based on, for instance, extended use, new revelations, additional features, and upgrades. Spec. ¶ 0001; Abstract. Claims 1, 8, and 15 are independent. Claims 1 and 8 are illustrative of the invention:

> 1. A computer system comprising:
>
> memory; and
>
> a processor in communication with the memory, the processor programmed to:
>
> receive, from a user, a first review of an asset;
>
> store the first review of the asset in association with a user identifier in a memory device;
>
> receive, from the user, a second review of the asset;
>
> store the second review in association with the first review and the user identifier in a memory device; and
>
> generate an opinion timeline for the asset for the user associated with the user identifier.
>
> 8. A computer-implemented method comprising:
>
> receiving, from a user, a first review of an asset;
>
> storing the first review of the asset in association with a user identifier in a memory device;
>
> receiving, from the user, a second review of the asset;
>
> storing the second review in association with the first review and the user identifier in a memory device; and

generating an opinion timeline for the asset for the user associated with the user identifier.[1]

Rejection on Appeal

The Examiner rejected claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by Brown (US 2002/0143608 A1, pub. Oct. 3, 2002).

ISSUE ON APPEAL

Does Brown disclose generating an opinion timeline for the asset for the user associated with the user identifier?

NEW GROUNDS OF REJECTION

Pursuant to our authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection for claims 1-7 under 35 U.S.C. § 112, second paragraph, for indefiniteness. Specifically, we construe "a processor . . . programmed to . . . generate an opinion timeline for the asset for the user associated with the user identifier" as recited in independent claim 1, as a "means-plus-function" limitation subject to 35 U.S.C. § 112, sixth paragraph, and conclude that the Specification's failure to disclose an algorithm corresponding to the recited function renders the claim indefinite under 35 U.S.C. § 112, second paragraph. We also enter a new ground of rejection for claims 8-20 under 35 U.S.C. § 112, first paragraph, for failure to satisfy the written description requirement.

[1] Independent claim 15 is directed to "[a] non-transitory computer-readable storage media having computer executable instructions stored thereon which cause a computer system to carry out a method when executed" wherein the method comprises the same steps as called for in method claim 8.

FINDINGS OF FACT

We find that the following enumerated findings of fact (FF) are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

Appellant's Invention

FF1. The Specification states "[t]he server 104 includes a processor 116 and memory 120, which are in communication with one another." Spec. ¶ 0029; Fig. 1. The Specification discloses that, when a user is browsing a web page, a request to access content is communicated to the server 104 over the network 108, and the processor 116 accesses the memory 120 to provide requested content, which is communicated to the user over the network 108. Spec. ¶ 0032; Fig. 1.

FF2. The Specification discloses a computer system 600 within which a set of instructions may be executed for performing any one or more of the methodologies discussed in the disclosure. Spec. ¶ 0052; Fig. 6. The "computer system 600 includes a processor 602 (e.g., a central processing unit (CPU), a graphics processing unit (GPU) or both) . . . ." Spec. ¶ 0053; Fig. 6.

FF3. The Specification discloses that instructions 626 embodying any of the functions described in the Specification may reside within the processor. Spec. ¶ 0055; Fig. 6 (instructions 626).

FF4. The Specification discloses a system 300 for creating an opinion timeline that includes an opinion timeline engine 304, which includes a logic layer 308 configured to generate an opinion timeline using data in the data stores 316-322. Spec. ¶¶ 0038-40; Fig. 3.

FF5. The Specification discloses that "[t]he logic layer 308 . . . associates these two user reviews together using the user identification information and/or asset identification information associated with both reviews." Spec. ¶ 0041. The logic layer 308 can then generate the opinion timeline. *Id.*

FF6. The Specification discloses a process 400 for creating an opinion timeline that includes allowing a user to submit a first review of an asset on a website (step 404), storing the first review of the asset on the website with a user identifier (step 408), allowing the user to submit a second review of the asset on the website (step 412), storing the second review with the first review and the user identifier (step 416), and generating an opinion timeline for the asset for the user associated with the user identifier (step 420). Spec. ¶¶ 0046-49; Fig. 4.

FF7. The Specification describes an example of steps 404 and 408 in which the opinion timeline engine 304 may receive a user review of an asset stored in one of the data stores 316-320 and stores that user review in the user opinion data store 322. Spec. ¶ 0047.

FF8. The Specification describes an example of steps 412 and 416 in which the opinion timeline engine 304 may receive a user review related to the first review and stores that user review in the user opinion data store 322. The second review may be an edit of the first review or an addition to the first review. The second review may be based on, for example, a change in opinion over time, a change in opinion based on an update, a comparison of a similar asset, and the like. Spec. ¶ 0048.

FF9. The Specification describes an example of step 420 in which the opinion timeline engine 304 may generate an opinion timeline using the

first review and the second review (e.g., by matching the user identifier of the first review with the user identifier of the second review). Spec. ¶ 0049.

FF10. Originally-filed claim 8 recited "[a] computer-implemented method comprising: allowing a user to submit a first review of an asset on a website; storing the first review of the asset on the website with a user identifier; allowing the user to submit a second review of the asset on the website; storing the second review with the first review and the user identifier; and generating an opinion timeline for the asset for the user associated with the user identifier."

Dictionary Definitions

FF11. AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 1398 (4th ed. 2006) (defining "processor" as "2. *Computer Science* **a.** A computer. **b.** A central processing unit. **c.** A program that translates another program into a form acceptable by the computer being used.").

FF12. MICROSOFT COMPUTER DICTIONARY 92 (5th ed. 2002) (defining "central processing unit" as "CPU"); *id.* at 132 (defining "central processing unit" as "[a]cronym for **c**entral **p**rocessing **u**nit. The computational and control unit of a computer. The CPU is the device that interprets and executes instructions . . . By definition, the CPU is the chip that functions as the 'brain' of a computer. In some instances, however, the term encompasses both the processor and the computer's memory or, even more broadly, the main computer console (as opposed to peripheral equipment.)").

FF13. MICROSOFT COMPUTER DICTIONARY 239 (5th ed. 2002) (defining "graphics coprocessor" as "[a] specialized microprocessor, included in some video adapters, that can generate graphical images such as

lines and filled areas in response to instructions from the CPU, freeing the CPU for other work"); *id*. at 240 (entry for "graphics processor" indicating "*[s]ee* graphics coprocessor").

FF14. AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 1810 (4th ed. 2006) (defining "timeline" as "**2a**. A chronology").

Brown's Disclosure

FF15. Brown discloses a system and method for electronically modifying historic sales baselines by evaluating product and consumer characteristics to accurately predict the impact of promotions on sales to specific groups of consumers (¶ 0002). A user adjusts a baseline by identifying and assigning values to factors that would have caused the baseline to be different had the factors been included to generate the baseline (¶ 0008).

FF16. Brown describes a main menu of a baseline modifying system (¶ 0051) which preferably includes an Add/Edit Modifying Factors option to adjust modifying factors (¶ 0053).

FF17. Brown discloses a preferred embodiment in which the modifying factors can be thought of as describing the nature of the relationship between the product and consumers. When a product is brand new, the user will at first estimate what values should be used for the various factors. As the user gains more experience with the product over time, the user is able to refine the values used for the modifying factors. (¶ 0057).

PRINCIPLES OF LAW

35 U.S.C. § 112, Sixth Paragraph

Special rules of claim construction allow for claim limitations drafted in functional language and are set forth in 35 U.S.C. § 112, sixth paragraph, which provides for:

> [a]n 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, sixth paragraph (emphasis added). While this provision permits a claim limitation to be set forth using solely functional language, it operates to restrict such claim limitations to those structures, materials, or acts disclosed in the specification (or their equivalents) that perform the claimed function. *Personalized Media Commc'ns, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 703 (Fed. Cir. 1998).

The Federal Circuit has established that use of the term "means" is central to the analysis of whether a claim limitation should be interpreted in accordance with 35 U.S.C. § 112, sixth paragraph: use of the word "means" creates a rebuttable presumption that the inventor intended to invoke § 112, sixth paragraph, whereas failure to use the word "means" creates a rebuttable presumption that the inventor did not intend the claims to be governed by § 112, sixth paragraph. *Id.* at 703-04; *Flo Healthcare Solutions, LLC v. Kappos*, 697 F.3d 1367, 1373 (Fed. Cir. 2012).

When an inventor has not signaled an intent to invoke § 112, sixth paragraph, by using the term "means," the presumption against its invocation is strong but can be overcome if "the claim term fails to recite

sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004) (quoting *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002) (internal quotation marks omitted) (citation omitted)). A claim limitation that "essentially is devoid of anything that can be construed as structure" can overcome the presumption. *Flo Healthcare*, 697 F.3d at 1374. The presumption may be overcome by a claim limitation that uses a non-structural term that is "simply a nonce word or a verbal construct that is not recognized as the name of structure" but is merely a substitute for the term "means for" associated with functional language. *Lighting World*, 382 F.3d at 1360. Claim language that further defines a term that otherwise would be a nonce word can denote sufficient structure to avoid construction under § 112, sixth paragraph, *MIT v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006), as can a claim limitation that contains a term that "is used in common parlance or by persons of skill in the pertinent art to designate structure," *Lighting World*, 382 F.3d at 1359. Nor will claim language invoke a § 112, sixth paragraph, construction if persons of ordinary skill in the art reading the specification understand the term to be the name for a structure that performs the function, even when the term covers a broad class of structures or identifies the structures by their function. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996) ("Many devices take their names from the functions they perform.").

Indefiniteness Analysis for Computer-Implemented Claim Limitations Interpreted Under 35 U.S.C. § 112, Sixth Paragraph

A claim limitation interpreted in accordance with 35 U.S.C. § 112, sixth paragraph, is construed to cover the corresponding structures, materials, or acts disclosed in the specification (and their equivalents) that perform the claimed function. *Personalized Media*, 161 F.3d at 703. For a computer-implemented claim limitation interpreted under § 112, sixth paragraph, the corresponding structure must include the algorithm needed to transform the general purpose computer or processor disclosed in the specification into the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Thus, the specification must sufficiently disclose an algorithm to transform the general purpose computer or processor to a special purpose processor programmed to perform the disclosed algorithm. *Id.* at 1338. An algorithm is defined, for example, as "a finite sequence of steps for solving a logical or mathematical problem or performing a task." MICROSOFT COMPUTER DICTIONARY 23 (5th ed. 2002). An applicant may express the algorithm in any understandable terms including as a mathematical formula, in prose, in a flow chart, or "in any other manner that provides sufficient structure." *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008).

An indefiniteness rejection under § 112, second paragraph, is appropriate if the specification discloses no corresponding algorithm associated with a computer or processor. *Aristocrat*, 521 F.3d at 1337-38. Mere reference to a general purpose computer or processor with appropriate programming without providing an explanation of the appropriate

programming, or to "software" without providing detail about the means to accomplish the software function, is not an adequate disclosure. *Id.* at 1334; *Finisar*, 523 F.3d at 1340-41. In addition, simply reciting the claimed function in the specification, while saying nothing about how the computer or processor ensures that those functions are performed, is not a sufficient disclosure for an algorithm which, by definition, must contain a sequence of steps. *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1384 (Fed. Cir. 2009).

If the specification explicitly discloses an algorithm, the sufficiency of the disclosure must be determined in light of the level of ordinary skill in the art. *Aristocrat*, 521 F.3d at 1337. The specification must sufficiently disclose an algorithm to transform a general purpose processor to a special purpose processor so that a person of ordinary skill in the art can implement the disclosed algorithm to achieve the claimed function. *Id.* at 1338.

35 U.S.C. § 112, First Paragraph

The first paragraph of 35 U.S.C. § 112 contains a written description requirement that is separate and distinct from the enablement requirement. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1340 (Fed. Cir. 2010) (en banc). The purpose of the written description requirement is to "ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification." *Id.* at 1353-54 (citation omitted). This requirement "ensures that the public receives a meaningful disclosure in exchange for being excluded from practicing an invention for a period of time." *Id.*

To satisfy the written description requirement, the specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed subject matter as of the filing date. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562-63 (Fed. Cir. 1991). Specifically, the specification must describe the claimed invention in a manner understandable to a person of ordinary skill in the art and show that the inventor actually invented the claimed invention. *Id.*; *Ariad*, 598 F.3d at 1351. The written description requirement does not demand any particular form of disclosure; however, "a description that merely renders the invention obvious does not satisfy the requirement." *Ariad*, 598 F.3d at 1352 (citations omitted). The written description requirement of 35 U.S.C. § 112, first paragraph, applies to all claims including original claims that are part of the disclosure as filed. *Id.* at 1349. Original claim language does not necessarily satisfy the written description requirement for the claimed subject matter. *Id.*

ANALYSIS

Claim Construction – Claim 1

Claim 1 recites a computer system comprising (a) memory and (b) a processor in communication with the memory and programmed to (i) "receive, from a user, a first review of an asset," (ii) "store the first review of the asset in association with a user identifier in a memory device," (iii) "receive, from the user, a second review of the asset," (iv) "store the second review in association with the first review and the user identifier in a memory device," and (v) "generate an opinion timeline for the asset for the user associated with the user identifier." The "processor" limitation is set

forth using functional language, raising the issue whether the limitation should be treated as a "means-plus-function" limitation under 35 U.S.C. § 112, sixth paragraph. The absence of the word "means" creates the strong – but rebuttable – presumption that the inventors did not intend the "processor" limitation to be governed by § 112, sixth paragraph. *See Flo Healthcare*, 697 F.3d at 1373. To determine whether the presumption is overcome, we must decide whether the term "processor" as used in claim 1 is one that connotes structure, or is instead a verbal construct devoid of structure that is used as a substitute for the term "means for." *See Lighting World*, 382 F.3d at 1360.

First, we consider how an ordinarily skilled artisan would understand the term "processor" as used in claim 1. Based on our review of dictionary definitions, we conclude that a skilled artisan would not recognize "processor" as the name of a sufficiently definite structure for generating an opinion timeline and performing the other functions recited by the "processor" limitation. Rather, a person skilled in the art of computer programming would recognize the term "processor" to mean a general purpose computer, a central processing unit ("CPU"), or a program that translates another program into a form acceptable by the computer being used. FF11, FF12; *see Lighting World*, 382 F.3d at 1360-61 (consulting dictionaries to determine whether a claim term has a generally understood meaning that denotes structure).

This interpretation is consistent with Appellant's Specification, which provides only non-limiting examples of a CPU, a graphics processing unit (GPU), or both a CPU and a GPU for a "processor" without providing a definition of "processor." FF1, FF2; *see Lighting World*, 382 F.3d at 1361

(consulting specification to determine whether a claim term denotes structure). We are not convinced that the disclosure of a CPU or a GPU (FF2) is sufficient structure for generating an opinion timeline or performing the other functions recited by the "processor" limitation without additional programming. Instead, one skilled in the art of computer programming would recognize the term "central processing unit" as a computer's computational and control unit that interprets and executes instructions. FF12. Similarly, one skilled in the art of computer programming would recognize the term "graphics processing unit" as a synonym for graphics processor or co-processor, which is a specialized microprocessor that can generate graphical images such as lines and filled areas in response to instructions from a CPU, freeing the CPU for other work. FF13.

Nor does Appellant's Specification provide any additional description sufficient to inform an ordinarily skilled artisan that the term processor connotes a sufficiently definite structure for generating an opinion timeline or performing the other functions recited by the "processor" limitation. FF1, FF2. Appellant's Figure 6 depicts, inside the processor 602, "Instructions 626" which represent software that may embody any of the functions described in the Specification (FF3) and, as such, does not connote a sufficiently definite structure for generating an opinion timeline.

We also consider whether the functions performed by the processor in claim 1 are functions typically found in a commercially available off-the-shelf processor. If a general purpose processor would be capable of performing the claimed functions, then a skilled artisan might understand the claim term "processor" to provide sufficient structure for performing those functions. *See In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d

1303, 1316 (Fed. Cir. 2011) (functions such as "processing," "receiving," and "storing" that can be achieved by any general purpose computer without special programming do not require disclosure of more structure than the general purpose processor that performs those functions). In this case, however, we conclude that at least generating the opinion timeline by the processor in claim 1 is not a typical function found in a general purpose processor and would require additional programming of the processor to implement, even where the processor is an off-the-shelf GPU. Therefore, unlike the claimed "control unit" comprising "a CPU and a partitioned memory system" that was held to provide sufficient structure to perform the claimed function of "controlling the communication unit," *see LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1372 (Fed. Cir. 2006), *rev'd on other grounds, Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008), here at least one of the claimed functions cannot be executed by a general purpose processor without additional programming. Accordingly, the claimed "processor" alone is not sufficient structure to perform the functions in claim 1.

The term "processor" also appears in claim 1 by itself without a structural modifier, which is further evidence that the term is a nonce word that is not recognized as the name of structure. *See Flo Healthcare*, 697 F.3d at 1374 (holding that "the generic term 'mechanism' standing alone may connote no more structure than the term 'means,'" but the term "height adjustment mechanism" designates a class of generally-understood structures). Nor does claim 1 include any structure connected to the processor that would indicate the processor itself is a sufficiently definite structure. Claim 1 is unlike the claims in *Inventio AG v. ThyssenKrupp*

Elevator Americas Corp., 649 F.3d 1350, 1359-60 (Fed. Cir. 2011), in which the claimed "computing unit" that was held to connote sufficiently definite structure was claimed to be connected to a modernizing device and to generate a destination signal for transmission to the modernizing device and was further claimed to be connected to floor terminals of the elevator system and evaluate incoming call reports, destination floors, and identification codes to generate the destination signal for processing by the modernizing device. In contrast, claim 1 does not recite any structure connected to the "processor" other than memory, which is not sufficient structure for performing all the recited functions. Nor does claim 1 recite the specific steps that the processor undertakes to perform all the recited functions, including the specific steps to generate an opinion timeline recited by claim 1.

The term "processor" in claim 1 is also different from the claim terms "circuit" and "circuitry," which have been held to denote sufficiently definite structure to avoid the application of § 112, sixth paragraph. *See MIT*, 462 F.3d at 1354-56; *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320-21 (Fed. Cir. 2004); *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1374 (Fed. Cir. 2003). The term "circuit" coupled with a description in the claims of the circuit's operation typically conveys the structural arrangement of the circuit's components. *See MIT*, 462 F.3d at 1355; *Linear Tech.*, 379 F.3d at 1320; *Apex*, 325 F.3d at 1373. In contrast, the recited processor and claim language here do not convey to a person skilled in the art anything about the internal components, structure, or specific operation of the processor.

For these reasons, we conclude that the term "processor" as used in claim 1 is a non-structural term that would not be understood by an ordinarily skilled artisan as having sufficiently definite structure to perform all the recited functions. The term is used as merely a substitute for the term "means for" associated with recited functional language and thus invokes the application of § 112, sixth paragraph. We also conclude that dependent claims 2-7 contain no additional language connoting structure sufficient to perform the recited functions, nor do they recite specific steps that the processor undertakes to perform the recited functions. These claims, therefore, are also interpreted under § 112, sixth paragraph.

New Ground of Rejection under 35 U.S.C. § 112, Second Paragraph – Claim 1

Having concluded that the "processor" limitation in claim 1 invokes the application of § 112, sixth paragraph, we now consider whether Appellant's Specification discloses sufficient corresponding structure for performing the claimed functions. *See Aristocrat*, 521 F.3d at 1333. Because the limitations of claim 1 are computer-implemented and cannot all be performed by a general purpose computer without any special programming, we must determine whether the Specification discloses an algorithm that transforms a general purpose processor into a special purpose processor that performs the claimed functions. *Id.*; *cf. Katz*, 639 F.3d at 1316.

Only two portions of the Specification describe the processor and any associated functions. In the first portion, the Specification discloses the server 104 includes a processor 116 and memory 120, which are in communication with one another, and the processor 116 accesses the memory 120 to provide requested content stored in the memory. FF1. That

description is merely a general statement that fails to mention the specific functions recited in claim 1, much less provide any detailed steps as to how the processor would perform generating an opinion timeline for the asset for the user associated with the user identifier or any of the other functions recited by claim 1.

The second portion of the Specification that describes the processor and its associated functions provides that instructions 626 embodying any of the functions described in the Specification may reside within the processor 602. FF2 (citing Fig. 6). Here, too, the Specification merely provides a general statement that fails to mention the specific functions recited in claim 1.

The Specification does disclose "an opinion timeline engine" including "a logic layer" configured to generate an opinion timeline using data in the data stores. FF4. The Specification, however, only discloses how two reviews of a user may be associated together – by using identification information and/or asset identification information associated with both reviews. FF5. This general description does not disclose how to generate an opinion timeline for the asset for the user associated with the user identifier, as recited in claim 1.

The Specification also contains a flow chart illustrating a five-step process for creating an opinion timeline, including "generating an opinion timeline" as the fifth step. FF6. The Specification, however, merely provides non-limiting examples for each step, which generally include identifying a component from Figure 3 which may be involved in the step. FF7-FF9. The Specification indicates that "[f]or example, the opinion timeline engine . . . may generate an opinion timeline using the first review

and the second review (e.g., by matching the user identifier of the first review with the user identifier of the second review)." FF6. The Specification does not specifically indicate that either processor 106 or processor 616 may generate an opinion timeline. Even if the opinion timeline engine could be understood as corresponding to the claimed processor, the flow chart step to generate an opinion timeline simply restates the function "generating an opinion timeline" and provides an example that the first and second reviews of a user could be used. The Specification, however, does not state *how* the first and second reviews of a user could be used to generate an opinion timeline. Although the Specification states how the reviews may be associated – that is, for example, by matching the user identifier of the first review with the user identifier of the second review (FF9) – this is not an algorithm for generating an opinion timeline, the function recited in claim 1. There is no algorithm to transform a general purpose processor into a special purpose processor for performing the function of generating an opinion timeline.

Even if the five steps shown in the flow chart could be understood as corresponding to the five functions ascribed to the claimed processor and the opinion timeline engine could be understood to be the claimed processor, the flow chart and accompanying description in the Specification simply restate the claimed functions without conveying to an ordinarily skilled artisan how the processor ensures that the functions, including the function "generate an opinion timeline," are performed. This determination is consistent with the Examiner's understanding. *See* Ans. 8 (noting the claim language "generating an opinion timeline" lacks any details of how such a timeline is generated).

As such, the Specification fails to disclose an algorithm that transforms the general purpose processor into a special purpose processor programmed to perform the functions recited in claim 1, including "generating an opinion timeline." *See Blackboard*, 574 F.3d at 1384; *Aristocrat*, 521 F.3d at 1334. Because Appellant's Specification fails to disclose an algorithm for performing all of the functions recited in the "processor" limitation of claim 1, it fails to describe sufficient corresponding structure as required for a limitation interpreted under 35 U.S.C. § 112, sixth paragraph.

Accordingly, we enter a new ground of rejection of claim 1 as being unpatentable under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 2-7 depend from claim 1 and therefore are also indefinite under 35 U.S.C. § 112, second paragraph. We also enter a new ground of rejection of claims 2-7 on this same basis.

New Ground of Rejection under 35 U.S.C. § 112,
First Paragraph – Claims 8-20

Claim 8 is directed to a computer-implemented method including, among other limitations, "generating an opinion timeline for the asset for the user associated with the user identifier." As an initial matter, we note that originally-filed claim 8 recited generating an opinion timeline (FF10). Although originally-filed claim 8 may have disclosed the asset for which the opinion timeline is generated, originally-filed claim 8 did not disclose how the "opinion timeline" itself is generated and so does not provide the necessary written description support for pending claim 8. *Accord Ariad*, 598 F.3d at 1349 (indicating original claim language does not necessarily satisfy the written description requirement for the claimed subject matter).

Although Appellant points to paragraph 0041 of his Specification as disclosing the generating limitation (App. Br. 3), the cited portion merely describes a means for associating two user reviews and does not describe how an opinion timeline can be generated (FF5). Further, as discussed in the previous section, the Specification only identifies a generic processor (FF1-FF2) and does not disclose an algorithm for "generating an opinion timeline for the asset for the user associated with the user identifier" (FF10). Beyond general statements of the function to be performed, which, at most, may render the claimed function obvious, the inventor has not shown how the recited opinion timeline is generated. This disclosure is not sufficient because a description that merely renders the invention obvious does not satisfy the written description requirement. *Ariad*, 598 F.3d at 1352.

Because Appellant's disclosure, as originally filed, does not convey to an ordinarily skilled artisan that Appellant had possession of the claimed invention, we conclude that claim 8 does not have sufficient written description support to satisfy 35 U.S.C. § 112, first paragraph.

Accordingly, we enter a new ground of rejection of claim 8 as being unpatentable under 35 U.S.C. § 112, first paragraph, for failure to satisfy the written description requirement. Claims 9-14 depend from claim 8 and therefore are unpatentable under 35 U.S.C. § 112, first paragraph for failure to satisfy the written description requirement. We also enter a new ground of rejection of claims 9-14 on this same basis.

Independent claim 15, from which claims 16-20 depend, also recites "generating an opinion timeline for the asset for the user associated with the user identifier." Claims 15-20 therefore are unpatentable under 35 U.S.C. § 112, first paragraph for failure to satisfy the written description

requirement. Accordingly, we enter a new ground of rejection of claims 15-20 on this basis.

If claims 1-7 were not construed under § 112, sixth paragraph, and therefore were not indefinite under § 112, second paragraph, we would also reject claims 1-7 as failing to satisfy the written description requirement § 112, first paragraph, because claim 1 contains similar limitations to claim 8 and claims 2-7 depend from claim 1.

Rejection under 35 U.S.C. § 102(e)

In rejecting independent claims 1, 8, and 15 under 35 U.S.C. § 102(e), the Examiner finds that Brown discloses the claimed invention. Ans. 5 (citing Brown ¶¶ 0031-32, 0042-43, 0046-49, 0053, 0057, 0078-80, 0086), 6 (indicating independent claims 8 and 15 are rejected on the same basis as claim 1). Appellant contends that the Examiner erred in rejecting the claims under 35 U.S.C. § 102 because Brown does not disclose, among other things, "generating an opinion timeline for the asset for the user associated with the user identifier," as recited in the independent claims. App. Br. 4-13; Reply Br. 1-2.

The issue regarding the anticipation rejection is whether Brown discloses generating an opinion timeline. We therefore begin by construing the term "opinion timeline." The broadest reasonable interpretation of "timeline" is a chronology (FF14), so an ordinarily skilled artisan would understand "opinion timeline" to mean chronologically arranged opinions. *Accord* App. Br. 6 (providing dictionary definitions for "timeline"); Reply Br. 2. This construction is consistent with the Specification, which discloses a user interface depicting an original user review 504 and an updated user

review 508 arranged in chronological order as an opinion timeline. Spec. ¶ 0051; Fig. 5B; *accord* App. Br. 6; Ans. 8.

With this construction, we also agree with Appellant that the portions of Brown cited by the Examiner do not disclose "generating an opinion timeline for the asset for the user associated with the user identifier" recited in claim 8. Rather, Brown generally discloses modifying historical sales information to more accurately predict sales of products. FF15-FF17. In the particular portions of Brown on which the Examiner relies, Brown discloses adding or modifying factors used to adjust historical sales information. FF16-FF17; Ans. 5. Although Brown describes how a user of the sales information system may refine factors entered when a product was new as the user gains experience with the product over time (FF17), this does not meet the limitation of generating an opinion timeline which requires generating a chronology of opinions. Enabling a user to refine factors does not disclose showing how the factors change over time.

For the foregoing reasons, we will not sustain the Examiner's § 102(e) rejection of claim 8, as well as the rejection of its dependent claims 9-14. Nor will we sustain the Examiner's § 102(e) rejection of independent claim 15, which contains similar limitations, as well as its dependent claims 16-20. We also will not sustain the Examiner's § 102(e) rejection of independent claim 1 and dependent claims 2-7 on the same basis in that Brown does not disclose the function of generating an opinion timeline.

DECISION

The Examiner's decision to reject claims 1-20 under 35 U.S.C. § 102(e) is reversed.

Pursuant to our authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection for claims 1-7 under 35 U.S.C. § 112, second paragraph, and enter a new ground of rejection for claims 8-20 under 35 U.S.C. § 112, first paragraph.

Section 41.50(b) provides that "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 C.F.R. § 41.50(b) also provides that Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the newly rejected claims:

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

<u>REVERSED; 37 C.F.R. § 41.50(b)</u>

babc