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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* GEORGE ARRIOLA, CARSTEN SCHWESIG,  
BRIAN JOHNSON, and MICHAEL BAUERLY

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Appeal 2018-008552  
Application 13/659,767  
Technology Center 2100

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Before MICHAEL J. STRAUSS, GREGG I. ANDERSON, and  
MICHAEL M. BARRY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1–20, which are all the pending claims. *See* Final Act. 1; Appeal. Br. 10–24. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use “Appellant” to refer to the “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real parties in interest as SONY CORPORATION and SONY NETWORK ENTERTAINMENT INTERNATIONAL LLC. Appeal Br. 3.

*Introduction*

Appellant states the “invention is related in general to software and more specifically relates to user interfaces and accompanying methods for facilitating user access to and interaction with electronic books.” Spec. ¶ 2.

Claim 1 is illustrative of the claims on appeal:

1. A method for accessing books, the method comprising the following acts performed by an electronic computing device:

displaying a band of plural adjacent tiles on a display screen operably connected to the electronic computing device, wherein each tile represents one or more books;

accepting a signal from a user input device to scroll the band on the display screen in a direction; and

spatially arranging adjacent tiles as viewed on the display screen based on a sorting rule, wherein the sorting rule includes arranging each tile in the band in accordance with recency of use, wherein recency of use is determined by the combination of a time of downloading and a time of use of a book associated with each tile in the band.

Appeal Br. 21 (Claims App’x).

*Rejections and References*

The Examiner rejected claims 1–20 under 35 U.S.C. § 101 as directed to a judicial exception (i.e., an abstract idea) without reciting significantly more. Final Act. 2.

The Examiner rejected claims 1, 3, 4, 6, 8, and 18–20 under 35 U.S.C. § 103 as unpatentable over Enomoto (US 2006/0288308 A1; pub. Dec. 21, 2006), Tremblay (US 2012/0324383 A1; pub. Dec. 20, 2012), Arora (US 2003/0018972 A1; pub. Jan. 23, 2003), Hutson (US 2008/0046599 A1; pub.

Feb. 21, 2008), and Apparao (US 2005/0028104 A1; pub. Feb. 3, 2005).  
Final Act. 3–7.

The Examiner rejected claim 5 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, and Kilroy (US  
2012/0151351 A1; pub. June 14, 2012). Final Act. 7–8.

The Examiner rejected claims 2, 7, 9, and 15–17 under § 103 as  
unpatentable over Enomoto, Tremblay, Arora, Hutson, Apparao, and Tse  
(US 2013/0021281 A1; pub. Jan. 24, 2013). Final Act. 8–12.

The Examiner rejected claim 10 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, and Haynes (US 2011/  
0145744 A1; pub. June 16, 2011). Final Act. 12–13.

The Examiner rejected claim 11 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, Haynes, and Saito (US 2004/  
0140975 A1; pub. July 22, 2004). Final Act. 13–14.

The Examiner rejected claim 12 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, Haynes, Saito, and Tse (US  
2013/0021281 A1; pub. Jan. 24, 2013). Final Act. 14–15.

The Examiner rejected claim 13 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, and Mathes (US 7,908,284  
B1; iss. Mar. 15, 2011). Final Act. 15–16.

The Examiner rejected claim 14 under § 103 as unpatentable over  
Enomoto, Tremblay, Arora, Hutson, Apparao, Mathes, and Yazdani (US  
2011/0153330 A1; pub. June 23, 2011). Final Act. 16–17.

*The § 101 Rejection*

For the § 101 rejection, Appellant contends the Examiner erred based on claim 1, which therefore is representative of all claims for this rejection.<sup>2</sup> Appeal Br. 10–11; 37 C.F.R. § 41.37(c)(1)(iv).

*General § 101 Law and the USPTO 2019 Guidance*

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g., Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71–73 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

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<sup>2</sup> There are two other independent claims (49 and 55), both of which include limitations analogous to the limitations of claim 29 that provide the basis for our decision for the § 101 rejection. *See* App. Br. 47–50 (Claims App’x).

Concepts determined to be abstract ideas, and, thus, patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical concepts (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). In *Diamond v. Diehr*, the claim at issue recited a judicial exception in the category of mathematical concepts, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” 450 U.S. 175, 176 (1981).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (internal citation omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77). “[M]erely requiring generic computer implementation fails to transform that abstract idea into a patent-eligible invention.” *Id.* at 212.

In early 2019, the USPTO recently published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50–57 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods

of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure (MPEP) § 2106.05(a)–(c), (e)–(h)).<sup>3</sup>

*See* 84 Fed. Reg. at 52, 54–55. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

*See* Revised Guidance, 84 Fed. Reg. at 56.

*The Examiner’s Determinations and Appellant’s Contentions*

The Examiner determines claim 1 is directed to the abstract idea of “sorting a list of tiles that represent books.” Final Act. 2 (further determining claim 1 does “not include additional elements that are sufficient to amount to significantly more than the judicial exception”). Appellant contends the Examiner erred because “claim 1 recites limitations that define a specific book-accessing method in terms of a sequence of steps.” Appeal Br. 10. Appellant contends the idea of claim 1 “is not an abstract idea, but a specific technological method that results in one particular sequential arrangement of representations of books on a screen.” *Id.* The Examiner responds, finding the relevant limitations of steps of claim 1 boil down to (1) “displaying data in an organized manner,” with “[t]he data being books organized in tiles on a

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<sup>3</sup> All references to the MPEP are to Rev. 08.2017 (Jan. 2018).

screen”; (2) “merely receiving input in order to manipulate the data displayed;” and (3) “logic used for organizing the data”. Ans. 4.

*Our Analysis*

*Alice/Mayo Step One, 2019 Guidance Step 2A Prong One*

In discerning ideas recited by claims according to the *Alice/Mayo* framework, it is improper to express such ideas in a way “untethered from the language of the claims.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). Here, as its preamble explains, claim 1 recites “[a] method for accessing books, the method comprising the following acts performed by an electronic computing device.” In other words, the preamble indicates the claim is directed a method for accessing electronic books. Artisans of ordinary skill would recognize electronic books as technological field. *See* Spec. 2–4 (in discussing the background of the invention, focusing on technology issues for electronic book software).

Keeping in mind the caveat from *Enfish*, we first summarize the steps recited in the body of claim 1 as follows. The “displaying” step focuses on displaying “a band of . . . adjacent tiles . . . wherein each tile represents one or more books.” The “accepting” step focuses on “scroll[ing] the band on the display.” The “spatially arranging” step focuses on “a sorting rule” that uses “recency of use” and “time of use of a book associated with each tile in the band.”

We determine<sup>4</sup> that the foregoing recited limitations, collectively, describe (recite) an idea for arranging displayed tiles in an electronically

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<sup>4</sup> “Whether a claim is drawn to patent-eligible subject matter is an issue of law that we review de novo.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1331 (Fed. Cir. 2010).

scrollable band of tiles, based on tile attributes. *See, e.g.*, Spec ¶¶ 26–27. This idea, which focuses on the idea of displaying “an electronically scrollable band of tiles,” is neither a mathematical concept, a method of organizing human activity, nor a mental process, as those categories are explained in the Revised Guidance. *See* 84 Fed. Reg. at 52; *see id.* nn. 12–15. In other words, we determine claim 1 does *not* recite a patent-ineligible abstract idea under and according to prong one of step 2A of the Revised Guidance.

Accordingly, we do not sustain the Examiner’s § 101 rejection of claims 1–20.

#### *The § 103 Rejections*

Appellant argues Examiner error in the § 103 rejection of the independent claims 1, 19, and 20 as a group, from which we select claim 1 as representative. App. Br. 12–17; 37 C.F.R. § 41.37(c)(1)(iv). Appellant presents no separate arguments for the § 103 rejections of claims 2–9 and 13–18, which accordingly stand or fall with claim 1. App. Br. 17; 37 C.F.R. § 41.37(c)(1)(iv). Appellants separately argue the patentability of dependent claim 10. App. Br. 18–19 (presenting no separate arguments for claims 11 and 12, which depend from (and stand or fall with) claim 10).

#### *Claim 1 (and Claims 2–9 and 13–20)*

In rejecting claim 1, the Examiner relies on Arora, in view of Enomoto, for teaching “spatially arranging adjacent tiles as viewed on the display screen based on a sorting rule, wherein the sorting rule includes arranging each tile in the band in accordance with . . . a time of use of a book associated with each tile in the band” as recited. *See* Final Act. 4 (citing

Arora ¶ 39), 7 (explaining claims 19 and 20 are “rejected under similar rationale”). Appellant contends that, regardless whether Arora “teaches that tiles may be selected for display based on attributes,” Arora does so only for “attributes that do **not** include time of use” and “[n]either **spatial arrangement** on a display nor **time of use** as a sorting criterion are involved.” Appeal Br. 12–13. Appellant contends in particular that Arora’s teaching of generating a “most watched” channel by determining the total viewing times of viewing of the channels does not teach the “time of use” aspect of the first disputed limitation. Appeal Br. 14.

Appellant does not persuade us of reversible error by the Examiner. The cited references must be considered for entirety of what they teach and suggest to one skilled in the art. *See, e.g., In re Hedges* 783 F.2d 1038, 1039 (Fed. Cir. 1986) (citing *In re Wesslau*, 353 F.2d 238, 241 (CCPA 1965)). Further, each reference cited by the Examiner must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The relevant inquiry is whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the *combined teachings* of the references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Here, Tremblay, which the Examiner cites in the rejection of claim 1, discloses “sorting data items based on . . . most recent” and presenting sortable displays of information sorted “based on a variety of sort criteria such as for example most used, most recent, author, creation date, type, alphabetic name, etc.” Tremblay ¶¶ 8, 9 (identifying such sorting as basic computerized functionality in the background and summary of the invention). Artisans of ordinary skill would have understood Tremblay’s

sorting of items based on “most recent” items teaches (or at least suggests) sorting based on the most recent time of use of the items.

Appellant also does not persuade us of reversible error in the Examiner’s finding that the cited art teaches or suggests spatial arrangement of tiles, as recited. *See* Appeal Br. 12–15 (contending there is no teaching that Arora’s grid of images for “channel displays” “are ever *spatially arranged on the display screen* based on any of user-selected attributes”). As the Examiner finds, and Appellant does not contest, Enomoto teaches the display of “a band of plural adjacent tiles on a display screen . . . , wherein each tile represents one or more books.” Final Act. 3 (citing Enomoto ¶ 39). The Examiner relies on Arora, in view of Enomoto, for teaching “spatially arranging adjacent tiles as viewed on the display screen based on a sorting rule,” as recited. Final Act. 4 (citing Arora ¶ 39). It is the combined teachings of Enomoto and Arora that the Examiner determines renders obvious the spatial arrangement of tiles based on a sorting rule, as recited. One cannot show nonobviousness by attacking references individually when the rejection is based on a combination of references. *Keller*, 642 F.2d at 425. Further, Appellant’s contention that Arora fails to teach arrangement “based on any of user-selected attributes” (Appeal Br. 15) is unpersuasive because it is not commensurate with the scope of the claim.

Appellant also contends the Examiner errs in the “interpretation of Hutson as teaching that the sorting rule that governs the *spatial arrangement of tiles viewed on a display screen* may include arranging each item based on the time of downloading.” App. Br. 14. This is unpersuasive because the Examiner does not rely on Hutson for teaching spatial arrangement of tiles. *See* Final Act. 5 (explaining the rejection relies on Hutson for its teaching of

“arranging items based on a sorting rule, wherein the sorting rule includes arranging each item in accordance with a time of downloading of an item” (citing Hutson ¶ 33).

Appellant further contends the Examiner erred because of the sorting rule requirement that the displayed tiles be spatially arranged based on recency of use of the corresponding book. Apparao, cited by the Examiner in this regard, at most teaches that a navigation history listing the URL’s of user-accessed websites, and the recency of that access, may be created and stored. Neither **spatial arrangement** on a display nor recency of **use** of corresponding content as a sorting criterion are involve[d].”

Appeal Br. 13; *see also id.* at 15 (specifically contending Apparao does not teach “a sorting rule based on *recency of use*, wherein recency of use is *determined by the combination of a time of downloading and a time of use* of a book associated with each tile in the band). This contention also is unpersuasive. As discussed above, the rejection relies on Enomoto and Arora for teaching “spatial arrangement” of tiles. The rejection also relies on Arora, not Apparao alone, for the “time of use” requirement. *See* Final Act. 4 (finding “Arora teaches arranging items based on a sorting rule, wherein the sorting rule includes arranging each item in accordance with a time of use”). *Vis-à-vis* Apparao, the rejection relies upon it only for teaching “that the items are sorted on a recency of use.” Final Act. 5 (citing Apparao ¶¶ 43–52) (explaining “Apparao teaches items can be ranked based on a number of factors of an item, including time of use, recency, type of use, etc.). We discern no error in this finding. *See, e.g.*, Apparao ¶ 48 (explaining that ranking (or sorting) of items “tak[es] into account the recency, frequency, average duration of visits”).

Appellant furthermore contends that “the Examiner’s suggested motivations to apply the teachings of Arora and Apparao to those of Enomoto as modified by Tremblay and Hutson is flawed.” Appeal Br. 15; *see also id.* at 16. We again are unpersuaded of Examiner error.

In making a proposed combination of teachings, the Examiner must articulate “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (*cited with approval in KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007) (“The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or . . .”). Here, the Examiner satisfies the *In re Kahn* standard, as exemplified by the following determinations:

It would have been obvious to one of ordinary skill in the art, having the teachings of Enomoto and Tremblay before him at the time the invention was made, to modify the menu system of Enomoto to include the sorting by metadata of Tremblay in order to obtain a menu system that sorts items based on meta-data. One would have been motivated to make such a combination because it reduces the time it takes a user to find an item.

...

It would have been obvious to one of ordinary skill in the art, having the teachings of Enomoto, Tremblay, and Arora before him at the time the invention was made, to modify the menu system of Enomoto to include the sorting by view time of Arora in order to obtain a menu system that sorts items based on viewing. One would have been motivated to make such a combination because it reduces the time it takes a user to find an item as a frequently viewed item is more likely to be desirable to the user.

Final Act. 4; *see also id.* at 5–6 (making similar determinations related to Hutson and Apparao).

Accordingly, we sustain the § 103 rejection of claim 1 and, along with it the § 103 rejections of claims 2–9 and 13–20. In doing so, as consistent with the foregoing, we adopt as our own the Examiner’s findings and reasoning in the rejection of claim 1.

*Claim 10 (and Claims 11 and 12)*

Claim 10, which depends indirectly from claim 1, recites “in response to the selection of a tile of the band, displaying an enlarged representation of the selected tile when a book associated with the selected tile has not yet been accessed.” App. Br. 22 (Claims App’x). The Examiner finds that Haynes, in view of the combined teachings of Enomoto, Tremblay, Arora, Hutson, and Apparao, teaches this disputed limitation by its “teach[ing of] displaying unread message in an enlarged format.” Final Act. 12 (citing Haynes ¶ 32 (explaining “Haynes teaches displaying unread message in an enlarged format)). Appellant contends Haynes is deficient because Haynes’s teaching of enlarging font size does not constitute “displaying an enlarged representation of the selected tile,” as recited, and “there is no teaching or suggestion of any change in font size happening *in response to a selection* of the corresponding message box” in Haynes. App. Br. 18.

Appellant’s argument is unpersuasive. As the Examiner responds, and we agree, Haynes teaches claim 10’s recited requirements for “in response to selection” and “displaying an enlarged representation.” Ans. 8–9 (citing Haynes Fig. 2, ¶¶ 25, 32). In particular, we discern no reversible error because Appellant does not persuasively explain how or why the Examiner errs in mapping (a) “[s]electing the taskbar element to view the available messages,” as taught by Haynes, to claim 10’s recited “in response to the selection” requirement, and (b) Haynes’ teaching of “[e]nlarging the font of

a message” to claim 10’s recited “display an enlarged representation” requirement for a not yet accessed item. *Id.* In view the combined teachings of Enomoto and Arora related to displaying a band of tiles and spatially arranging tiles according to a sorting rule, as discussed above, Appellant does not persuade us the Examiner erred in determining the additional teachings of Haynes, in combination with the other cited art, renders claim 10 obvious. *KSR*, 550 U.S. at 421 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”) (*see also id.* at 418–20).

Accordingly, we sustain the § 103 rejections of claims 10–12. In doing so, as consistent with the foregoing, we adopt as our own the Examiner’s findings and reasoning in the rejection of claim 10.

### CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
1–20	§ 101		1–20
1, 3, 4, 6, 8, and 18–20	§ 103 Enomoto, Tremblay, Arora, Hutson, and Apparao	1, 3, 4, 6, 8, and 18–20	
5	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, and Kilroy	5	
2, 7, 9, and 15–17	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, and Tse	2, 7, 9, and 15–17	
10	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, and Haynes	10	
11	§ 103	11	

<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
	Enomoto, Tremblay, Arora, Hutson, Apparao, Haynes, and Saito		
12	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, Haynes, Saito, and Tse	12	
13	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, and Mathes	13	
14	§ 103 Enomoto, Tremblay, Arora, Hutson, Apparao, Mathes, and Yazdani	14	
<b>Overall Outcome</b>		1–20	

AFFIRMED