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EXAMINER

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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* ERIC E. KUO

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Appeal 2017-008175  
Application 14/272,186  
Technology Center 3600

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Before JOSEPH L. DIXON, MAHSHID D. SAADAT, and  
JOHN P. PINKERTON, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Final Rejection of claims 1–26. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> According to Appellant, the real party in interest is Align Technology, Inc. App. Br. 3.

## STATEMENT OF THE CASE

### *Introduction*

Appellant's Specification describes "devices, files, mediums, and methods for keeping medical information private." Spec. 1:10–11.

### *Representative Claim*

Representative claim 1 under appeal reads as follows;

1. A personal data file on a computing device readable medium having executable instructions which can be executed by a processor to cause a computing device to:

designate personal information about a subject of the personal data file, where the personal data file includes a plurality of personal information data fields;

display a patient image of at least a portion of a patient's body on a display of a computing device;

define a first portion of the patient image as a privacy region;

receive a user selection via the computing device to hide the first portion of the patient image; and

hide the first portion of the patient image using the defined privacy region and leave a second portion of the patient image visible to a viewer of the patient image, where the hidden first portion of the patient image is viewable to the viewer by entry of a pass code by the user into the computing device.

### *Rejections on Appeal*

The Examiner rejected claims 1–26 under 35 U.S.C. § 101 for being directed to patent-ineligible subject matter. *See* Final Act. 2.

The Examiner rejected claims 1–26 under 35 U.S.C. § 103(a) as unpatentable over Knaus (US 2002/0004727 A1; pub. Jan. 10, 2002), Uemura (US 2008/0013727 A1; pub. Jan. 17, 2008), and Eida (US 2003/0120517 A1; June 26, 2003). *See* Final Act. 3–9.

## ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments that the Examiner has erred. We disagree with Appellant’s contention that the Examiner erred. Instead, we concur with the conclusions reached by the Examiner. Except as noted below, we adopt as our own the reasoning set forth by the Examiner in the Final Office Action and the Examiner’s Answer.

### *REJECTION UNDER 35 U.S.C. § 101*

#### *Principles of Law*

Under 35 U.S.C. § 101, a patent may be obtained “for any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” The Supreme Court has “long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 215–16 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). The Supreme Court in *Alice* reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 573 U.S. at 2.

The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* The Court acknowledged in *Mayo* that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Mayo*, 566 U.S. at 71. Therefore, we look to

whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and otherwise merely recite generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016). If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step, in which the elements of the claims are considered “individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 79, 78).

*Alice/Mayo – Step 1*

The Examiner determines claim 1 “is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea.” Final Act. 2. The Examiner further determines “[t]he claims are directed to the abstract idea of organizing personal data files,” which is patent-ineligible. *See id.*

Appellant contends claim 1 is not directed to an abstract idea under 35 U.S.C. § 101 because the claim, and similarly the other independent claims 8 and 16, recite “more than merely the abstract idea of ‘. . . organizing a personal data file . . .’” App. Br. 7. Appellant further asserts “[c]laims 1, 8, and 16 further recite additional features that are sufficient to transform the claimed subject matter into a patent-eligible application. *Alice*, 134 S. Ct. at 2357.” App. Br. 7–8.

The Examiner responds:

The abstract idea in independent claims is embodied in the claims and is identified as: collecting personal data files including images, defining privacy regions on the images, and displaying the patient image with the hidden portions encrypted with passcodes. These steps corresponds to concepts identified as abstract ideas by the courts, such as “an idea of itself” as referenced in *Alice Corp.* An example of “an idea of itself” is the concept that is analogous to the court-defined abstract idea in *Electric Power Group* in that it collects information (collecting information regarding which portions to hide), analyzes it (analyzes the designation rules for the images), and displays certain results (displaying the blurred out portion image to the user) of the collection and analysis.

Ans. 2–3.

Appellant contrasts the appealed claims with those in *Electric Power Group* case and asserts claims 1, 8, and 16 “do go beyond requiring the mere collection, analysis, and display of available information in a particular field.” Reply Br. 2–3. According to Appellant, the claims recite “more than merely the abstract idea of ‘collecting personal data files including images, defining privacy regions on the images, and displaying the patient image with the hidden portions encrypted with passcodes’ (as stated on Page 2 of the Examiner's Answer).” Reply Br. 3.

We are unpersuaded by Appellant’s arguments. Upon review of Appellant’s claims and Specification, and consistent with the Examiner’s findings, we agree with the Examiner’s determination that the claims are directed to the abstract idea of collecting and aggregating data to partially display data while hiding parts of the data that is identified as private. Obtaining and displaying patient data is substantially similar to the economic practices that were deemed to be patent-ineligible subject matter

in *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (collection and analysis of information); *Classen Immunotherapies, Inc. v. Biogen IDEC*, 659 F.3d 1057 (Fed. Cir. 2011) (collecting and comparing known information); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”); and *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring information presented to a user based on particular information).

Further, collecting and aggregating data to make parts of the data hidden from the user, as recited in claim 1, involve gathering and displaying of data and selecting which part of the results are displayed based on analyzing the data without any asserted inventive technology. See *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (“The advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.”). Thus, we agree with the Examiner’s finding that claims 1, 8, and 16 are directed to an abstract idea.

In light of the above, the Examiner correctly concluded that claims 1–26 are directed to an abstract idea.

*Alice/Mayo – Step 2*

The Examiner determines each of the elements of claim 1 separately and in combination does not amount to significantly more than “(i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer

functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.” Final Act. 2. The Examiner also determines “[v]iewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.” *Id.*

Appellant contrasts the appealed claims with those in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) and argues:

The claims recite a solution necessarily rooted in computer technology to overcome a problem specifically arising in the realm of computer networks, specifically the problem of hiding identifying information of a clinical data file before sending a clinical data file over an unsecured Internet connection to retain the anonymity of the patient information included in the clinical data file (e.g., maintaining doctor-patient confidentiality).

...

Identical to *DDR Holdings*, the claims do not recite a mathematical algorithm, nor do they recite fundamental economic or longstanding commercial practice.

...

That is, just as *DDR Holdings* was directed to retaining website visitors (e.g., maintain revenue for the host), Appellant’s claimed subject matter is directed toward a processor causing a computing device to hide, using a privacy region, a first portion of a patient image and leave a second portion of the patient image visible to a viewer of the patient image to maintain doctor-patient confidentiality, for example, when sending a clinical data file including the patient image over an unsecured Internet connection.

App. Br. 8. Additionally, Appellant points to page 13, lines 4–14, of the Specification and asserts the solution provided in the claims “is necessarily

rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” App. Br. 9.

The Examiner responds that “while the claims require concrete, tangible components such as a ‘processor’ and ‘computing device,’ the specification makes clear that the recited components merely provide a generic environment in which to carry out the abstract idea of displaying an image with a hidden portion.” Ans. 3. The Examiner finds the Specification includes no technical details for the argued components and instead, refers to their functionalities such that no use of the Internet or functions that are particular to Internet are identified. *Id.* The Examiner further explains:

The patent at issue in DDR provided an Internet-based solution to solve a problem unique to the Internet that (1) did not foreclose other ways of solving the problem, and (2) recited a specific series of steps that resulted in a departure from the routine and conventional sequence of events after the click of a hyperlink advertisement. *Id.* at 1256-57, 1259. The patent claims here do not address problems unique to the Internet, so DDR has no applicability.

Ans. 3–4.

We are not persuaded by Appellant’s arguments. Instead, we agree with the Examiner (*see* above) that the recited computer components and functions are recited at a high level of generality such that the claims recite generic computer components performing generic computer functions (*e.g.*, “designate,” “define,” “receive” and “hide”), and the claims amount to no more than implementing the abstract idea with a computerized system.

Contrary to Appellant’s argument that the claimed invention addresses maintaining doctor-patient confidentiality, for example, when sending a clinical data file including the patient image over an unsecured Internet

connection, we conclude that the claimed functionality of designating personal files, displaying a patient image, and hiding a defined portion of the patient image merely improves the efficiency of the privacy measures in the medical field (*i.e.*, selectively displaying or sending a patient image) implemented by the computer system. In other words, the argued improvement is really an improvement of the underlying economic practice itself, rather than an improvement of the computer system or computer technology that implements the underlying economic practice.

Appellant's argument that claim 1 is similar to the claims in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014), is also not persuasive. App. Br. 8. In *DDR*, the court determined that the claims at issue were necessarily rooted in computer technology in order to address the Internet-centric problem of how to provide user access to computer-implemented applications over the Internet. *DDR*, 773 F.3d at 1257. In contrast, sending a clinical data file including the patient image over an Internet connection such that portions of personal files that are designated confidential are hidden, as recited in claims 1, 8, and 16, are not necessarily rooted in computer technology, because the recited features could also occur outside the context of computer technology (*e.g.*, if the aforementioned selecting and hiding a portion of the patient image are implemented using pen and paper).

In light of the above, the Examiner correctly concluded that claims 1–26 do not amount to significantly more than an abstract idea. We, therefore, sustain the Examiner's rejection of claims 1–26 under 35 U.S.C. § 101.

*REJECTION UNDER 35 U.S.C. § 103*

In rejecting claim 1, the Examiner relies on Knaus as disclosing the recited “designate personal information about a subject of the personal data file” and on Uemura as disclosing “display a patient image of at least a portion of a patient’s body on a display of a computing device” and “hide a first portion of the patient image . . . and leave a second portion of the patient image visible.” Final Act. 3–4. The Examiner further finds Eida discloses the claim limitation of “define a first portion of the patient image as a privacy region” and “hide the first portion of the patient image.” Final Act. 4 (citing Eida ¶¶ 186–189). The Examiner finds it would have been obvious to one of ordinary skill in the art to combine the teachings of Knaus and Uemura with Eida to improve presentation of information by limiting the display of information to the viewer based on entry of a pass code and to provide patients control over their personal medical records that contain confidential information. Final Act. 4, 5.

Appellant argues the proposed combination does not teach or suggest the recited elements of claim 1 because the cited passages in paragraphs 45–49 and 59 of Uemura relate to disclosure of images and not “hiding a first portion of a patient image using a defined privacy region while leaving a second portion of the patient image visible.” App. Br. 11. Acknowledging Eida discloses a partial deletion of a portion of a patient’s image, Appellant contends Eida does not teach the recited hiding a first portion of a patient image because deleting and hiding are not the same. App. Br. 12.

We are not persuaded by Appellant’s above-mentioned contentions because the Examiner’s rejection is based on the combination of Eida with Knaus and Uemura. *See also* Reply Br. 6–7. That is, the Examiner finds

Uemura teaches hiding a first portion of the patient's image and leaving a second portion visible to a viewer while the hidden portion may be viewed upon providing a pass code. *See* Ans. 4–5. The Examiner further relies on Eida as teaching the recited steps of “define a first portion of the patient image as a privacy region” and “hide the first portion of the patient image.” Final Act. 4–5; Ans. 5.

Eida, in paragraph 189 discloses “if the face and the diseased part of the female patient are entered in the data of a same image, either one is deleted or obscured in order to alleviate the uneasiness of the patient,” which indicates that a portion of the patient's image is not shown. We also agree with the Examiner that *hiding a portion of an image* encompasses *obscuring* or *deleting* that part of the image. That is, consistent with Appellant's disclosure describing examples of how “hiding a first portion of the patient's image” is achieved using “blacking out” or blurring” of the area, hiding a portion of an image by deleting or obscuring in Eida meets the recited step of “hide a first portion of a patient's image.” *See* Specification 12:27–13:3; Fig. 6.

As discussed above, we are not persuaded by Appellant's contention that the combination of the references does not teach or suggest the recited claim features or the cited passages in Eida do not teach “hiding a first portion of the patient's image. *See* App. Br. 9–13. Appellant's contentions focus on the references separately and ignore the fact that the proposed rejection is based on the combination of Eida with Knaus and Uemura. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981); *In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

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Therefore, we sustain the 35 U.S.C. § 103(a) rejection of claims 1, 8, and 16, as well as claims 2–7, 9–15, and 17–26, which are not argued separately or with sufficient specificity. *See* App. Br. 13.

#### DECISION

We affirm the Examiner’s rejections of claims 1–26 under 35 U.S.C. § 101.

We affirm the Examiner’s rejections of claims 1–26 under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED