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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DONALD KEVIN MCEACHERN and BO ZOU

Appeal 2017-001803¹
Application 12/508,640²
Technology Center 2400

Before JOSEPH A. FISCHETTI, NINA L. MEDLOCK, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1, 5–10, 14–16, and 24–31³ in the Non-Final Office Action (“Non-Final Act.”) mailed February 3, 2016. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our Decision references Appellants’ Appeal Brief (“App. Br.,” filed June 30, 2016), and Reply Brief (“Reply Br.,” filed Nov. 15, 2016), as well as the Examiner’s Answer (“Ans.,” mailed Sept. 15, 2016).

² Appellants identify the real party in interest as “BlackBerry Limited” (App. Br. 3).

³ Claims 2–4, 11–13, and 17–23 have been cancelled (*see id.* at 14–16, Claims Appendix).

STATEMENT OF THE CASE

Claimed Invention

Appellants' "invention relates to the field of communications systems, and, more particularly, to electronic messaging communications systems and related methods." Spec. ¶ 2.

Claims 1, 10, and 24 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. An electronic messaging method comprising:
 - storing at least one signature field to be included in electronic messages on a message server in one of a plurality of different character set formats;
 - receiving electronic message body text at the message server to be included in an electronic message for a given communications network among a plurality of communications networks, the body text having a respective character set format;
 - comparing the character set format of the body text with the character set format of the at least one signature field and
 - when the at least one signature field is displayable in the character set format of the body text, formatting the at least one signature field in the character set format of the body text,
 - when the at least one signature field is not displayable in the character set format of the body text, formatting the body text and the at least one signature field in a default character set format that is associated with the given communications network and is different from the character set format of the body text, and
 - transmitting the formatted body text and the formatted at least one signature field to a recipient communications device via the given communications network.

App. Br. 14, Claims Appendix.

*Rejections*⁴

The following rejections are before us for review:

Claims 1, 5–10, 14–16, and 24–31 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception without significantly more. Non-Final Act. 3–4.

Claims 1, 5–10, 14–16, and 24–31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Greer (US 6,247,048 B1, iss. June 12, 2001), Ogawa (US 2003/0078982 A1, pub. Apr. 24, 2003), and Rosen (US 2009/0325609 A1, pub. Dec. 31, 2009). *Id.* at 4–13.

ANALYSIS

Non-Statutory Subject Matter

Under 35 U.S.C. § 101, 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 § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) (internal quotation marks and citation omitted).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Incorporated*, 566 U.S. 66, 82–84 (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*,

⁴ We treat the inclusion of cancelled claim 17 in the statements of rejections (Non-Final Act. 3, 5; Ans. 2) as inadvertent error.

134 S. Ct. at 2355. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim into a patent-eligible application.’” *Id.* (quoting *Mayo*, 566 U.S. at 66, 78–79). This inventive concept must do more than simply recite “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Under *Alice* step one, “[t]he transcoding of email messages is determined [by the Examiner] to be an abstract idea, based on the 2014 Interim Eligibility Guidance on Patent Subject Matter Eligibility, as it is merely the transformation of data (email content) from one form of representation (character set format) to another (character set format).” Non-Final Act. 4.

Appellants argue against the Examiner’s § 101 rejection of claims 1, 5–10, 14–16, and 24–31 as a single group. *See* App.Br. 5–10. We select independent claim 1 as the representative claim for the group, and, thus, claims 5–10, 14–16, and 24–31 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv). In particular, Appellants argue the claimed invention is not directed to an abstract idea, but instead, “directed to a solution that ensures that message content will be legible at a recipient end of a communication.” App. Br. 6 (“For instance, despite the fact that a message header may indicate a first character set encoding (e.g., UTF-8), an ISP may transcode message content to another character set (e.g., ISO-2022-JP) due to

localization.”). Appellants assert “the claimed invention provides for a system and method for only selectively converting a signature field, or the signature field and body text, of a message to improve the likelihood that the entire message will be legible by a recipient when received and displayed at a recipient device.” *Id.* at 6–7. Although Appellants acknowledge that “the Examiner did not have the benefit of the updated Office examination guidance published in May 2016 subsequent to the decision . . . in *Enfish, LLC v. Microsoft Corp.*”⁵ (*id.* at 7), they nevertheless argue the Examiner’s characterization of the abstract idea is inadequately supported because it has not been compared to a concept that courts have identified as an abstract idea. *Id.* at 8 (quoting from May 2016 Office Memo).

As Appellants point out,

the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided. *See, e.g., Elec. Power Grp.*, 830 F.3d [1350,] 1353–54 [(Fed. Cir. 2016)]. That is the classic common law methodology for creating law when a single governing definitional context is not available. *See generally* Karl N. Llewellyn, *The Common Law Tradition: Deciding Appeals* (1960). This more flexible approach is also the approach employed by the Supreme Court. *See Alice*, 134 S. Ct. at 2355–57. We shall follow that approach here.

Amdocs (Isr.) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016).

To that end, in *Novo Transforma Techs., LLC v. Sprint Spectrum L.P.*, No. CV 14-cv-612-RGA, 2015 WL 5156526 (D. Del. Sept. 2, 2015), *aff’d*,

⁵ 822 F.3d 1327 (Fed. Cir. 2016).

669 F. App'x 555 (Fed. Cir. 2016), the court considered a claim similar to Appellants' claim 1, which converted and delivered content. That claim in *Novo* recited:

23. A payload delivery method for providing guaranteed end-to-end delivery of a payload from a sender to a recipient, said payload being delivered via one or more communication networks, comprising the steps of:
generating a payload in a first media;
defining payload delivery parameters by said sender;
converting said payload to an alternative media at different locations as necessary for completion of delivery of said payload; and
automatically [notifying] said sender upon receipt of said payload by said recipient.

Id.

Similarly here, claim 1 is drawn to an electronic messaging method comprising: (1) *storing* a signature field to be included in electronic messages in one of a plurality of different character set formats; (2) *receiving* body text to be included in an electronic message for a given communications network having a respective character set format; (3) *comparing* the character set format of the body text with that of the signature field: (a) when the signature field is displayable in the character set format of the body text, *formatting* the signature field in the format of the body text, (b) otherwise, *formatting* the body text and the signature field in a default character set format associated with the given network; and (4) *transmitting* the formatted body text and signature field via the given communications network.

In *Novo*, the Specification stated “that the claimed invention addresses the problem of ‘incompatibility between different communication services employing different media for communicating information.’”

2015 WL 5156526, at *3 (quoting Specification of U.S. Pat. No. 5,826,034). Here, Appellants' Specification discloses that "the use of different email protocols, such as character sets, by different email systems may result in compatibility issues when emails are communicated between the various systems." Spec. ¶ 4.

In determining the abstract idea, the *Novo* court explained:

Incompatible communication types have existed since before the emergence of computers and the Internet. Translators have been used for centuries to facilitate communication between individuals who speak different languages. The translator receives a message in one language, translates it into another, and delivers the translated message. Here, the claims require a computer system that receives a payload in one media form, translates it into a different media form, and delivers the translated payload. This is no different than the function of a translator.

Novo, 2015 WL 5156526, at *3; accord *Messaging Gateway Solutions, LLC v. Amdocs, Inc.*, No. CV 14-732-RGA, 2015 WL 1744343, at *4 (D. Del. Apr. 15, 2015) (receiving a short message service text message, converting it to an Internet Protocol message, and delivering the converted message directed to the abstract idea of translation.).

Considering the parallel descriptive nature of *Novo*, in our view, claim 1 is directed to storing, receiving, comparing, formatting, and transmitting data according to rules. *See, e.g.*, Spec. ¶¶ 21, 44–47, 83. We determine the concept of formatting data by changing the "character set format," as recited in claim 1, is substantively similar to the abstract idea of translating data from one format to another in *Novo*, a decision affirmed by the Court of Appeals for the Federal Circuit. *Cf.* Spec. ¶¶ 24, 25, 28–30 (Japanese ISPs using ISO-2022-JP character set encoding for emails v. email

messages in UTF-8). Essentially, our articulation of the abstract idea comports with Appellants' characterization of the claimed concept as "directed to a solution that ensures that message content will be legible at a recipient end of a communication" (App. Br. 6) upon translation from one format to another.

Furthermore, Appellants' claimed concept is analogous to collecting and manipulating data, which the Federal Circuit has determined to be an abstract idea. *See, e.g., Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1142, 1150 (Fed. Cir. 2016) (claims reciting "[a] method for converting a hardware independent user description of a logic circuit. . . into logic circuit hardware components" were "drawn to the abstract idea of: translating a functional description of a logic circuit into a hardware component description of the logic circuit"); *Broadband iTV, Inc. v. Hawaiian Telcom, Inc.*, 669 F. App'x 555 (Fed. Cir. 2016) (unpublished per curiam mem.) (affirming district court's grant of summary judgement of invalidity of patent as being directed to patent-ineligible subject matter directed to nothing more than the abstract idea of translation of a data from one format to another); *Elec. Power*, 830 F.3d at 1353–54 (collecting and analyzing data, and displaying the results of the collection and analysis, regardless of particular content, is an abstract idea). Examining these past cases, especially the similar descriptive nature of the concept in *Novo*, we see little character difference between "transformation of data (email content) from one form of representation (character set format) to another (character set format)" as proffered by the Examiner (Non-Final Act. 4), and the abstract idea in *Novo*. Because we are not apprised of error as to the

Examiner’s determination under *Alice* step one, we proceed to the second step in the *Alice* framework.

Under step two of *Alice*, the Examiner determines that “a generic computer is performing a generic computer mathematical function to transcode email characters between character formats, which is a well-understood, routine and conventional activity previously known to the industry. Therefore, the claims as a whole do not recite significantly more than the exception itself, and are not eligible subject matter.” Non-Final Act. 4.

Appellants do not dispute the Examiner’s determination under *Alice* step two. Instead, Appellants argue that even if the claims are directed to an abstract idea, they claim significantly more because the Examiner’s “analysis ignores the combination of claim limitations, and the effect of the claimed invention as a whole.” App. Br. 9–10. Citing the decision in *BASCOM*,⁶ Appellants contend the claims recite a specific, discrete implementation of the idea of transcoding emails . . . [that] provide[s] a solution that is a technical improvement over the prior art transcoding of email. *Id.* at 10; *see also* Reply Br. 4. We do not agree.

In *BASCOM*, the Federal Circuit held that “[t]he inventive concept described and claimed in the ’606 patent is the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.” 827 F.3d at 1350. The court explained that the remote location of a filtering tool having customizable user-specific filtering features provides the filtering tool both the benefits of a filter on a

⁶ *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

local computer and the benefits of a filter on the ISP server, which is a technical improvement over prior art ways of filtering content. *Id.* at 1350–51. Here, Appellants have not shown any particular arrangement in the claims as providing an inventive concept.

Indeed, Appellants’ claims do not address a problem rooted in technology. These claims are unlike those in *Enfish*, in which the Federal Circuit determined the claims eligible because they focused on a specific software-based improvement to database techniques. *Enfish*, 822 F.3d at 1335–36. Nor are they like the claims in *DDR Holdings*,⁷ “rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” because those claims required an inventive device or technique for displaying information. 773 F.3d at 1257. Unlike *DDR Holdings* and *Enfish*, receiving and converting messages is not a problem specifically arising in the realm of computers. Instead, the claims’ character, as a whole, lies in longstanding conduct that exists apart from computers—i.e., receiving and converting messages and responses. *See Novo*, 2015 WL 5156526, at *4. In Appellants’ own words, the claimed invention is “directed to a solution that ensures that message content will be legible at a recipient end of a communication” (App. Br. 6) to prevent for example the text of a name from a Japanese character set encoding “being displayed as garbled or unreadable symbols to the end user.” Spec. ¶ 24.

Notwithstanding the claims’ recitation of generic computing devices and conventional communications network, the claims uses computers to receive, compare, and convert messages or data, which is merely the

⁷ *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

application of computers to solve a conventional problem of incompatibility. For example, the ability to implement the solution using functions normally performed by general purpose computers indicates the claims are not “inextricably linked to the operations of computers,” and, thus, we are unpersuaded that they represent advances in computer technology. Further, although preemption (*see* App. Br. 10 (“Nor do the claims preempt all ways of transcoding email messages”), may signal patent-ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). As such, we are unpersuaded the Examiner erred in concluding “the claims as a whole do not recite significantly more than the exception itself, and are not eligible subject matter.” Non-Final Act. 4.

Accordingly, we are not persuaded for the reasons set forth above that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the rejection of claim 1, including claims 5–10, 14–16, and 24–31, which fall with claim 1.

Obviousness over Greer, Ogawa, and Rosen

On February 3, 2015, in a prior Decision on Appeal, the Board affirmed the Examiner’s decision to reject claims 1–23 under § 103 as unpatentable over Greer and Ogawa. *See* Dec. 6 (Appeal 2012–008607). Appellants filed a Request for Continued Examination (RCE) on April 3, 2015 in which then pending independent claims 1, 10, and 17 were amended.

Appellants argue the rejection of independent claims 1, 10, and 24 under 35 U.S.C. § 103(a) as a group. App. Br. 11–12. We select claim 1 as

representative of this group. Thus, claim 10 and 24 stand or fall with claim 1. We have considered Appellants' arguments against the Examiner's rejection of claim 1 as unpatentable over the combination of Greer, Ottawa, and Rosen, but we are not persuaded of error for the following reasons.

Appellants argue the Greer, Ogawa, and Rosen combination teaches how to implement a message formatting process that is counterintuitive to the claimed solution because "an entire message must always be formatted together." App. Br. 12.

The cited combination fails to disclose, for example, "when the at least one signature field is displayable in the character set format of the body text, formatting the at least one signature field in the character set format of the body text"; and "when the at least one signature field is not displayable in the character set format of the body text, formatting the body text and the at least one signature field in a default character set format that is associated with the given communications network and is different from the character set format of the body text". There is no basis to conclude that the claimed subject matter of the independent claims would have been obvious to the skilled worker, given the contrary teachings presented in the Greer-Ogawa-Rosen combination.

Id.

First, Appellants' argument that both "when" limitations must be taught by the prior art is unpersuasive because it is not commensurate with the scope of claim 1. In performing the process of claim 1, the claim only requires that one of those "when" conditions must be performed because "the at least one signature field" cannot be both "displayable" and "not displayable" in the character set format of the body text at the same time. *See Ex Parte Schulhauser*, Appeal 2013-007847, 2016 WL 6277792, at *3-5 (PTAB Apr. 28, 2016) (precedential) (holding that in a method claim, a

step reciting a condition precedent does not need to be performed if the condition precedent is not met).

Second, as to Appellants' position that all the cited references require that an entire message must be formatted together, the Examiner provides reasoning and citations to the prior art to the contrary. *See* Ans. 5–7. For example, the Examiner finds “Rosen disclose[s] the transcoding of an email [0108], [0114], where one of the message parts of the email included an electronic signature [0083].” *Id.* at 6. In view of the teachings of Greer and Ogawa with Rosen, “[o]ne of ordinary skill would want to format both the body as in Ogawa and the signature as in Rosen in order to present a completely reformatted message when necessary.” *Id.* at 7. In the Reply Brief Appellants do not rebut or dispute these findings, thus, we are not apprised of error by the Examiner.

Instead, in their Reply Brief, Appellants assert that the Examiner's obviousness analysis is only possible due to impermissible hindsight because

[t]here is nothing in the prior art to indicate that the problem identified by the inventors of this application, which causes garbling of messages, was identified as a problem to be solved or that the person skilled in the art would have recognized that it could be solved in the manner recited in the claims.

Reply Br. 4.

But, contrary to Appellants' assertion, Ogawa discloses that “[i]f the receiving apparatus receives an incompatible character set, it will not be able to appropriately display and record characters, creating so-called an indecipherable garbling (meaningless group of characters).” Ogawa ¶ 6.

It is general practice that the above-described set phrases are displayed using the pre-registered character sets in the language native to the country where the apparatus is used. As a result, an e-mail message sent to a destination having a different language, e.g., a message is sent to another country, will render the set phrase attached to the e-mail message indecipherable for the receiver. For example, when sending an e-mail message having a set phrase in Japanese to the USA from Japan, many American will consider the phrase indecipherable; therefore, the message fails to be understood by the receiver.

Id. ¶ 7. Thus, Ogawa aims to solve this problem by providing an email transmission “method that is able to prevent a garbling at receiving terminals.” *Id.* ¶ 8; *see also id.* ¶¶ 42–44 (describing various conditions for conversion of data into a character set).

For the foregoing reasons, we are not apprised of error in the rejection of claim 1 under 35 U.S.C. § 103(a). Therefore, we sustain the rejection of independent claim 1, including independent claims 10 and 24, which fall with claim 1. We sustain the rejection of dependent claims 5–9, 14–16, and 25–31 for the same reasons, because Appellants do not separately argue these claims, and instead rely on the arguments discussed above as to the independent claims. *See App. Br.* 13.

DECISION

The Examiner’s rejection of claims 1, 5–10, 14–16, and 24–31 under 35 U.S.C. § 101 is affirmed.

The Examiner’s rejection of claims 1, 5–10, 14–16, and 24–31 under 35 U.S.C. § 103(a) is affirmed.

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

AFFIRMED