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EXAMINER
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GLASS, RUSSELL S

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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* RICHARD WISENOECKER and WEI HUA ZHOU

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Appeal 2016-007265  
Application 13/724,800<sup>1</sup>  
Technology Center 3600

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Before PHILIP J. HOFFMANN, BRADLEY B. BAYAT, and  
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

SILVERMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–10. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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<sup>1</sup> The Appellants identify Nokia Siemens Networks Oy as the real party in interest. Appeal Br. 1.

### ILLUSTRATIVE CLAIM

1. A method for maintaining continuity of Diameter online charging comprising:

a) in response to a mobile station moving from an old prepayment client terminal to a new prepayment client terminal, relocating a prepayment client terminal from the old prepayment client terminal to the new prepayment client terminal and re-authenticating the mobile station at the new prepayment client terminal;

b) transmitting context information of an old Diameter online charging session from the old prepayment client terminal to the new prepayment client terminal after the re-authentication has been successfully completed, and request for a quota by a prepayment proxy to a prepayment server via the new prepayment client terminal;

c) sending to the prepayment server a message indicating the relocation of the prepayment client terminal from the old prepayment client terminal to the new prepayment client terminal;

d) maintaining by the prepayment proxy an old quota and a new quota separately, and using the old quota continuously for online charging until the new quota is available and is valid for the prepayment proxy to ensure continuity of the old Diameter online charging session;

e) sending a continuously charging message to the prepayment server prompting the prepayment server to complete the old online Diameter charging session;

f) after the new quota has become available and valid, reporting by the prepayment proxy to the prepayment server the information regarding the used old quota, returning by the prepayment proxy a remaining balance of the old quota to the prepayment server, and initializing by the prepayment proxy a closure of the old Diameter online charging session; and

g) closing the old Diameter online charging session by the old prepayment client terminal.

## REJECTION

Claims 1–10 are rejected under 35 U.S.C. § 101 as ineligible subject matter.

## FINDINGS OF FACT

The findings of fact relied upon, which are supported by a preponderance of the evidence, appear in the following Analysis.

## ANALYSIS

Laws of nature, natural phenomena, and abstract ideas are deemed ineligible for patenting, because they are regarded as the basic tools of scientific and technological work, such that their inclusion within the domain of patent protection would risk inhibiting future innovation premised upon them. *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013). Of course, “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply’” these basic tools of scientific and technological work. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). Accordingly, ascertaining ineligible subject matter involves a two-step framework for “distinguish[ing] between patents that claim the buildin[g] block[s] of human ingenuity and those that integrate the building blocks into something more, thereby transform[ing] them into a patent-eligible invention.” *Id.* (internal quotation marks and citation omitted). The first step determines whether the claim is directed to judicially excluded subject matter (such as a so-called “abstract idea”); the second step determines whether there are any “additional element” recited in the claim that (either individually or as an “ordered combination”) amount to

“significantly more” than the identified judicially excepted subject matter itself. *Id.* at 2355.

Under the first *Alice* step, the Final Office Action states that the claims are directed to the abstract idea of “charging a mobile client for services from an old terminal until a new terminal is established.” Final Action 2. The Examiner’s Answer, in addition to re-stating the rejection (Answer 2), goes on to characterize the abstract idea alternatively as “maintaining the continuity of an online charging session” (*id.* at 3).

In regard to the second *Alice* step, the rejection states:

The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than mere software instructions for to implement the abstract idea on a generic computer. Viewed 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.

Final Action 2. *See also* Answer 4–5.

Asserting error in the rejection, the Appellants argue that the claims are not directed to an abstract idea (*see* Appeal Br. 9–14) and that, in any event, the claims contain additional elements that amount to significantly more than the identified abstract idea (*see id.* at 14–17).

The Appellants’ argument, regarding the second *Alice* step, persuades us of error in the rejection, notwithstanding any determination of the adequacy of either of the Examiner’s descriptions of an abstract idea to which the claims might be directed. Accordingly, the following discussion focuses on the Appellants’ argument regarding the second *Alice* step.

In particular, the Appellants argue that the claims include elements that amount to significantly more than the identified abstract idea:

[T]he claimed invention as recited in claim 1 recites five terminals, including a mobile station, an old prepayment client terminal, a new prepayment client terminal, a prepayment server, and a prepayment proxy. Claim 1 also recites very specific functions/operations that are performed among these five terminals.

*Id.* at 15. Specifically, the Appellants point to two limitations of claim 1 as bases for patent eligibility, under the second *Alice* step:

d) maintaining by the prepayment proxy an old quota and a new quota separately, and using the old quota continuously for online charging until the new quota is available and is valid for the prepayment proxy to ensure continuity of the old Diameter online charging session; [and]

f) after the new quota has become available and valid, reporting by the prepayment proxy to the prepayment server the information regarding the used old quota, returning by the prepayment proxy a remaining balance of the old quota to the prepayment server, and initializing by the prepayment proxy a closure of the old Diameter online charging session.

*See id.* at 15–16. According to the Appellants, the claimed subject matter is not simply an instruction to implement the identified abstract idea in a generic computer environment. *Id.* at 14–16. Instead, “the claims of the present case specify an example of how operations/functions are to be performed in order to maintain continuity of a session for a mobile station in a wireless network to support wireless mobility.” *Id.* at 16.

Neither the Final Office Action, nor the Examiner’s Answer, explicitly addresses either of the two identified claim limitations, in regard to whether they might amount to significantly more than the identified abstract idea. Instead, the Examiner regards the recited features in terms of

their individual components, without addressing the recited operation of, or the interactions among, such components that are explicitly asserted, by the Appellants, as giving rise to patent-eligibility under the second *Alice* step.

The Answer for example, states:

The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the abstract idea because the generically-recited computer elements (e.g. terminal, server, etc.) do not add a meaningful limitation to the idea because the actions, functions, and/or steps performed by the generically-recited computer elements would be routine and conventional in any computer implementations.

Answer 4.

Yet, the operation of claim 1’s recited “prepayment proxy” — which “maintain[s] . . . an old quota and a new quota separately” and, “after the new quota has become available and valid, report[s] . . . to the prepayment server the information regarding the used old quota,” and “return[s] . . . a remaining balance of the old quota to the prepayment server” — is not a feature of either version of the identified abstract idea that the Examiner provides. Nor does the Examiner provide any reasoning or explanation for the position that the “prepayment proxy” and its operation could be well-understood, routine, or conventional. Notably, “[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir. 2018).

Therefore, we are persuaded that the rejection does not adequately establish that independent claim 1 lacks any element, or combination of elements, amounting to significantly more than the identified abstract idea.

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The foregoing discussion applies similarly to independent claim 10. Accordingly, we do not sustain the rejection of claims 1–10 under 35 U.S.C. § 101.

DECISION

We REVERSE the Examiner’s decision rejecting claims 1–10 under 35 U.S.C. § 101.

REVERSED