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EXAMINER
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LOFTUS, ANN E

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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* RENE C. SCHAUB

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Appeal 2015-007873  
Application 10/641,385<sup>1</sup>  
Technology Center 3600

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Before BIBHU R. MOHANTY, MATTHEW S. MEYERS, and  
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant seeks our review under 35 U.S.C. § 134 of the final rejection of claims 30–36, 38–44, and 47–50 which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

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<sup>1</sup> According to the Appellant, Oracle International Corporation is the real party in interest (App. Br. 1).

## THE INVENTION

The Appellant's claimed invention is directed to data processing and data totaling operations (Spec., para. 2). Claim 47, reproduced below, is representative of the subject matter on appeal.

47. A method comprising:
- populating, by a database server, a single summary table; wherein the single summary table is persistently stored in a relational database that resides on non-volatile storage;
  - wherein the relational database is managed by the database server;
  - wherein the database server is executing on one or more computing devices;
  - wherein populating the single summary table includes storing, within the single summary table, a plurality of pre-computed sums;
  - wherein the plurality of pre-computed sums include parent sums and child sums;
  - wherein each of the parent sums is the sum of two or more corresponding child sums;
  - wherein a particular column of the single summary table includes:
    - for a first row, a first child sum for a first interval;
    - for a second row, a second child sum for a second interval; and
    - for a third row, a parent sum that includes at least the first child sum and the second child sum and is for a third interval that includes the first interval and the second interval.

## THE REJECTIONS

The following rejections are before us for review:

1. Claims 30–36, 38–44, and 47–50 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

2. Claims 31–34, 36, 39–42, and 47–50 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rauer et al. (US 6,161,103 issued Dec. 12, 2000), Colby et al. (US 2001/0013030 A1, published Aug. 9, 2001), and portions of the Specification identifying prior art.

3. Claims 30, 35, 38, 43, and 44 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rauer, Colby, and Jensen et al. (US 2003/0188260 A1, published Oct. 2, 2003).

### FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence<sup>2</sup>.

#### *Rejection under 35 U.S.C. § 101*

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).

In judging whether claim 47 falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97

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<sup>2</sup> *See Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

(2012)). In accordance with that framework, we first determine whether the claim is “directed to” a patent-ineligible abstract idea. *Id.* If so, we then consider the elements of the claim both individually and as “an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application of the abstract idea. *Id.* This is a search for an “inventive concept”—an element or combination of elements sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself. *Id.* The Court also stated that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 2358.

Here, we determine that the claim is directed to the abstract concept of performing a mathematical function in a table using summing operations. This is directed to the use of an algorithm and can be performed largely in a series of mathematical steps and is an abstract idea beyond the scope of § 101.

We next consider whether additional elements of the claim, both individually and as an ordered combination, transform the nature of the claim into a patent-eligible application of the abstract idea, e.g., whether the claim does more than simply instruct the practitioner to implement the abstract idea using generic computer components. We conclude that it does not.

Considering each of the claim elements in turn, the function performed by the computer system at each step of the process is purely conventional. Each step of the claimed method does no more than require a generic computer to perform a generic computer function.

Here, the claim is not rooted in technology, but rather is a basic math operation performed on a generic computer in a conventional manner. For this reason the rejection of claim 47 and its dependent claims is sustained. Claims 49 and 50 are drawn to similar subject matter and the rejection of these claims is sustained as well.

*Rejection under 35 U.S.C. § 103(a)*

The Appellant argues that the rejection of claim 47 is improper because the cited prior art does not disclose or suggest the claim limitations:

*wherein a particular column of the single summary table includes:*

*for a first row, a first child sum for a first interval;  
for a second row, a second child sum for a second interval; and  
for a third row, a parent sum that includes at least the first child sum and the second child sum and is for a third interval that includes the first interval and the second interval.*

(App. Br. 4, emphasis added). Further arguments are presented in the Appeal Brief at pages 4–7.

In contrast, the Examiner has determined that the above cited claim limitations are found in the Specification Background at Figure 2, Table 133; Colby at paragraph 50; and Rauer at column 29, line 10–column 30, line 10 (Ans. 4, 5).

We agree with the Appellant. Here, even taking the above citations to the Specification Background, Colby at paragraph 50, and Rauer at column 29, line 10–column 30, line 10 to disclose all the argued elements of the claim limitations above, the rejection lacks adequate articulated reasoning with rational underpinnings for such a modification without impermissible

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hindsight. Accordingly the rejections of claim 47 and its dependent claims are not sustained.

Independent claim 49 contains similar claim limitations and the rejection of this claim and its dependent claim is not sustained as well.

#### CONCLUSIONS OF LAW

We conclude that Appellant has not shown that the Examiner erred in rejecting claims 30–36, 38–44, and 47–50 under 35 U.S.C. § 101.

We conclude that Appellant has shown that the Examiner erred in rejecting claims 30–36, 38–44, and 47–50 under 35 U.S.C. § 103(a).

#### DECISION

The Examiner's rejection of claims 30–36, 38–44, and 47–50 is sustained.

AFFIRMED