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EXAMINER

CHANG, TOM Y

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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* SOENG-HUN KIM, GERT-JAN VAN LLESHOUT,  
and  
HIMKE VAN DERVELDE<sup>1</sup>

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Appeal 2018-000437  
Application 14/329,539  
Technology Center 2400

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Before JOSEPH L. DIXON, CARLA M. KRIVAK, and  
JOHNNY A. KUMAR, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–36. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

STATEMENT OF THE CASE

Appellants' invention is directed to “method and apparatus for transmitting and receiving a status report of Automatic Repeat reQuest (ARQ) in an ARQ layer” (Spec. 1:17–18).

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<sup>1</sup> Appellants identify the real party in interest as Samsung Electronics Co., Ltd., Gyeonggi-do, Republic of Korea.

Independent claim 1, reproduced below, is exemplary of the subject matter on appeal.

1. A method at a receiving device comprising an automatic repeat request (ARQ) entity and a hybrid ARQ (HARQ) processor in a mobile communication system, the method comprising:

receiving, by the HARQ processor, a packet from a transmitting device;

receiving, by the ARQ entity, the packet from the HARQ processor;

determining, by the ARQ entity, whether a status report by the receiving device is triggered based on at least one triggering condition;

constructing, by the ARQ entity, the status report comprising a status of the received packet at a transmission opportunity indicated by the HARQ processor, if the status report is triggered; and

transmitting, by the HARQ processor, the status report to the transmitting device.

#### REFERENCES and REJECTIONS

The Examiner rejected claims 1–36 under 35 U.S.C. § 101 as directed to a non-statutory judicial exception.

The Examiner rejected claims 1–36 under 35 U.S.C. § 102(e) based upon the teachings of Torsner (US 2007/0008990 A1; published Jan. 11, 2007).

The Examiner rejected claims 1, 10, 19, and 36 under 35 U.S.C. § 102(e) based upon the teachings of Herrmann (US 2010/0172445 A1; published July 8, 2010).

The Examiner rejected claims 1–3, 6–12, 15–21, 24–30, and 33–36 under 35 U.S.C. § 103(a) based upon the teachings of Hebsgaard (US 2005/0094632 A1; published May 5, 2005) and Torsner.

## ANALYSIS

### *Rejection under 35 U.S.C. § 101*

The Examiner finds claims 1–36 are directed to a judicial exception without significantly more and are therefore an abstract idea (Final Act. 2). Particularly, the Examiner states independent claims 1, 10, 19, and 28 “recite the general steps of receiving a[stet] by a[stet] ARQ entity a packet from a HARQ processor” (Final Act. 2–4). We do not agree.

Appellants’ claims recite an apparatus and method used in a mobile communication system including a transmitter and a receiver including an automatic repeat request (ARQ) entity and a hybrid ARQ (HARQ) processor.

Appellants contend the Examiner erred in finding the claims are directed to a general purpose computer that perform a fundamental economic practice or mathematical equation; rather, “the claims are directed to a specific implementation of a solution to a problem in the field of electronic devices in [a] mobile communication system” (App. Br. 8; See also App. Br. 7, citing page 17 of the Specification). We agree with Appellants the claimed invention is not directed to an abstract idea.

Therefore, we do not sustain the Examiner’s rejection of claims 1–36 under 35 U.S.C. § 101.

*Rejections under 35 U.S.C. § 102*

The Examiner rejected claims 1–36 as anticipated by Torsner (Final Act. 4–8). Appellants contend, although the Examiner cites to paragraphs 31, 55, 62, 64, and 77 of Torsner (Final Act. 4–6), the Examiner has not explained how the “HARQ processor (the L2 MAC sub-layer in Torsner) receiv[es] a packet from a transmitting device, and the ARQ entity (the MAC-ARQ sub-layer in Torsner) receiv[es] the packet from the HARQ processor” (italics deleted) (App. Br. 11). We agree with Appellants the Examiner has failed to identify, *inter alia*, the operations in Torsner that correspond to the claimed limitation “receiving, by the ARQ entity, the packet from the HARQ processor” (*id.*).

The Examiner rejected claims 1, 10, 19, and 36 as anticipated by Herrmann (Final Act. 8–9). Appellants contend, although the Examiner cites to paragraphs 22, 52, and 53 of Herrmann, the Examiner has not explained where Herrmann teaches “constructing, by the ARQ entity, the status report comprising a status of the received packet at a transmission opportunity indicated by the HARQ processor, if the status report is triggered,” as claimed (italics omitted) (App. Br. 18). We agree with Appellants the Examiner has failed to identify where in Herrmann this limitation is found.

Therefore, we do not sustain the Examiner’s rejections of claims 1–36 under 35 U.S.C. § 102.

*Rejection under 35 U.S.C. § 103*

The Examiner rejected claims 1–3, 6–12, 15–21, 24–30, and 33–36 as obvious over Hebsgaard and Torsner (Final Act. 9–15). The Examiner finds

Hebsgaard does not teach the steps of receiving by the HARQ processor, receiving by the ARQ entity, and constructing, by the ARQ, the status report, but relies on Torsner for disclosing these limitations (Final Act. 10–11).

As we agree *supra*, that Torsner does not teach these claim limitations, Torsner does not cure the deficiencies of Hebsgaard (*see* App. Br. 19–21). Therefore, we do not sustain the Examiner’s rejection of claims 1–3, 6–12, 15–21, 24–30, and 33–36 under 35 U.S.C. § 103.

#### DECISION

The Examiner’s decision rejecting claims 1–36 under 35 U.S.C. § 101 is reversed.

The Examiner’s decision rejecting claims 1–36 under 35 U.S.C. § 102 is reversed.

The Examiner’s decision rejecting claims 1–3, 6–12, 15–21, 24–30, and 33–36 under 35 U.S.C. § 103 is reversed.

REVERSED