UNITED STATES PATENT AND TRADEMARK OFFICE
_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD
_____

ERICSSON INC. AND TELEFONAKTIEBOLAGET LM ERICSSON,
Petitioner,

v.

INTELLECTUAL VENTURES II LLC,
Patent Owner.
_____

Case IPR2018-01380
Patent 8,682,357 B2
_____

Before BRIAN J. MCNAMARA, DAVID C. MCKONE, and
AMBER L. HAGY, *Administrative Patent Judges.*

HAGY, *Administrative Patent Judge*.

DECISION TO INSTITUTE
35 U.S.C. § 314

I. INTRODUCTION

Ericsson Inc. and Telefonaktiebolaget LM Ericsson (collectively, "Petitioner") filed a Petition (Paper 2, "Pet.") to institute an *inter partes* review of claims 11–14, 19, 30–33, 38, 47–50, and 54 (the "challenged claims") of U.S. Patent 8,682,357 B2 (Ex. 1001, the "'357 patent"). Intellectual Ventures II LLC ("Patent Owner") filed a Preliminary Response (Paper 6, "Prelim. Resp.").

Institution of an *inter partes* review is authorized by statute when "the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a). A decision to institute under 35 U.S.C. § 314 may not institute on fewer than all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

After considering the evidence and arguments presented in the Petition and the Preliminary Response, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing unpatentability of claims 11–14, 19, 30–33, 38, 47–50, and 54 of the '357 patent, and we institute on all challenged claims and on all asserted grounds.

A. Related Proceedings

Petitioner states the '357 patent has been asserted by Patent Owner in the following cases: *Intellectual Ventures II LLC v. T-Mobile USA, Inc. et al.*, Case No. 2:17-cv-00661 (E.D. Tex. 2017); and *Intellectual Ventures II LLC v. Sprint Spectrum, L.P. et al.*, Case No. 2:17-cv-00662, (E.D. Tex. 2017). Pet. 3; *see also* Paper 3, 1.

B. The '357 Patent

The '357 patent is entitled "Paging in a Wireless Network," and
claims a priority date of May 2, 2006. Ex. 1001 [54, 22]. The '357 patent is
directed to a method of paging user equipment ("UE"), such as a mobile
terminal, within a wireless network. *See id.* at 1:10–12, 30–31. Figure 1,
reproduced below, depicts a cellular communication system according to
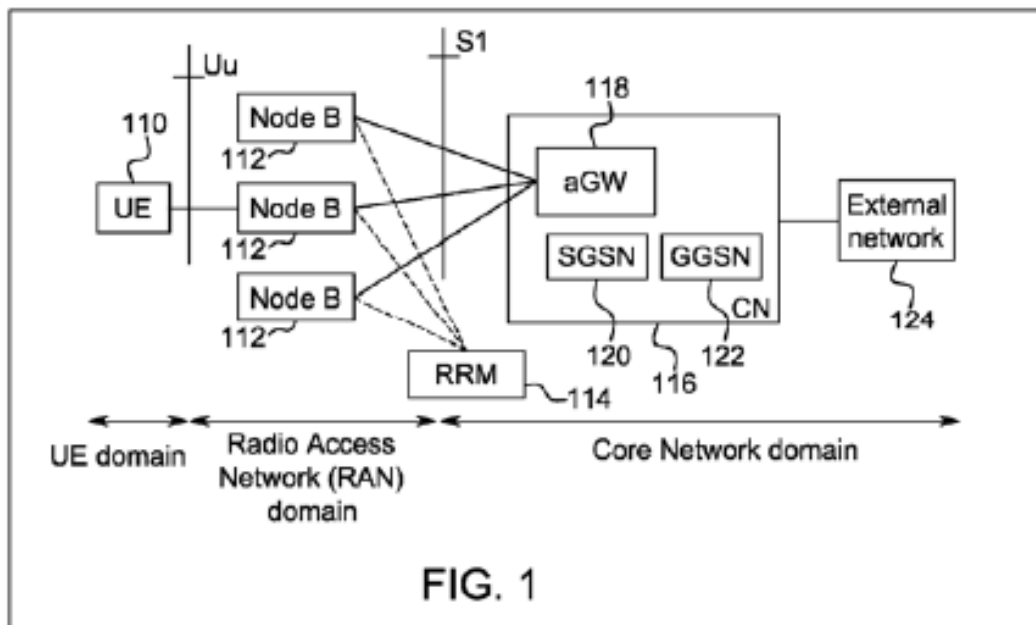embodiments of the invention. *Id.* at 4:40–41.

FIG. 1

Figure 1 of the '357 patent, reproduced above, illustrates a cellular
communication network including "a UE domain, a radio access network
(RAN) domain, and a core network domain." *Id.* at 4:41–43. Figure 2 of the
patent, reproduced below, illustrates an exemplary wireless network
comprising an access gateway (aGW, 118), various Node-B base stations
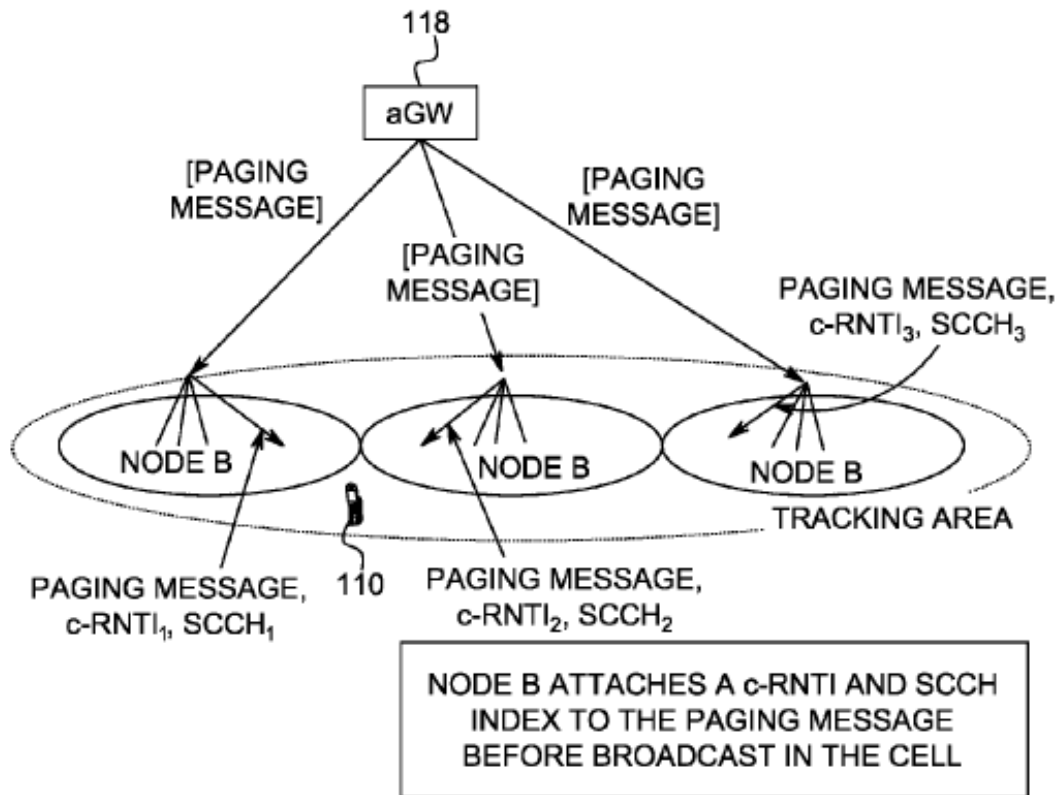each servicing a cell, and UE (110).

FIG. 2

Figure 2 of the '357 patent, reproduced above, depicts a "network-initiated connection establishment according to embodiments of the invention." Ex. 1001, 3:54–55.

According to the '357 patent, to preserve power and network resources, UEs (e.g., mobile terminals) in the UE domain stay in an idle mode when not in use. *Id.* at 1:10–17, 1:36–38. "In idle mode, the mobile terminal has no connection to the RAN; however, it is connected to the core network." *Id.* at 1:38–40. When the RAN wants to establish a connection to an idle UE, the core network initiates the connection via a paging process. *Id.* at 1:21–29. A network device within the core network (the aGW) initiates the connection by transmitting a paging message to a NodeB. *Id.* at

2:60–3:2. The NodeB receives the paging message and affixes information to the message. *Id.* In an embodiment, the affixed information includes a "cell-specific radio network temporary identity" ("RNTI") and "index(es) to one or a set of shared control channels (SCCHs)." *Id.* 2:66–3:2. The NodeB then broadcasts the modified message to the UE, which periodically wakes up to listen for an incoming paging message. *Id.* at 3:7, 6:50–65, Fig. 9.

The NodeB may send the paging message to a UE on separate channels. *Id.* at 3:21–3:30. In particular, the '357 patent describes examples of ways that a NodeB may divide the elements across various channels during transmission:

> The paging message may be conveyed to the UE using:
> (1) paging indicators mapped onto a paging indicator channel (PICH), and the paging message mapped onto separate paging channels (PCH), (2) paging indicators mapped onto a shared control channel (SCCH) and the paging message mapped onto separate paging channels (PCH); or (3) paging indicators mapped onto a shared control channel (SCCH) and the paging message mapped onto a downlink shared transport channel (SCH).

Id. The '357 patent calls the division of these elements across separate channels "two-stage paging." *Id.* at 5:66–6:3. According to an embodiment of two-stage paging shown below in Figure 9, each UE listens to a separate control channel (e.g., SCCH) for a paging indicator: "The UEs listen to the appropriate SCCH for paging indicators . . . ." *Id.* at 6:56–58.

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.

fastcase®
Smarter legal research.