

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SERVICENOW, INC.,  
Petitioner,

v.

HEWLETT-PACKARD CO.,  
Patent Owner.

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Case IPR2015-00717  
Patent 7,027,411

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Before RAMA G. ELLURU, CHRISTOPHER L. CRUMBLEY, and  
BARBARA A. PARVIS, *Administrative Patent Judges*.

CRUMBLEY, *Administrative Patent Judge*.

DECISION  
Institution of *Inter Partes* Review  
37 C.F.R. § 42.108

## I. INTRODUCTION

ServiceNow, Inc. filed a Petition seeking *inter partes* review of claims 1 and 3 of U.S. Patent No. 7,027,411 (Ex. 1001, “the ’411 patent”). Paper 1, “Pet.” The owner of the ’411 patent, Hewlett-Packard Company (“HP”), did not file a Patent Owner’s Preliminary Response.

Pursuant to 35 U.S.C. § 314(a), we may not institute an *inter partes* review “unless the Director<sup>[1]</sup> determines that 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.” Upon consideration of the briefing and supporting evidence, we determine that the information presented establishes that there is a reasonable likelihood that ServiceNow would prevail with respect to claims 1 and 3 of the ’411 patent. Accordingly, we institute an *inter partes* review of these claims.

### A. The ’411 Patent

The ’411 patent relates to a system and method for “mapping the topology of a network having interconnected nodes by identifying changes in the network and updating a stored network topology based on the changes.” Ex. 1001, Abstract. According to the patent, the topology of a network is a description of the network including the location of nodes on the network and the interconnections between them. *Id.* at 1:31–33.

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<sup>1</sup> “The Board institutes the trial on behalf of the Director.” 37 C.F.R. § 42.4(a).

Knowing the topology of a network aids in intelligent routing of data packets, resulting in a reduction in network congestion. *Id.* at 1:29–31.

The method of the '411 patent involves compiling “data tuples” which represent information about the nodes of the network, including host identifiers, connector interfaces, and port specifications. *Id.* at 3:6–9. An existing topology of the network is stored in a topology database, which is used to create a list of current tuples. *Id.* at 3:9–12. A new set of tuples is calculated using a “connection calculator,” and a “topology converter” receives the new tuples, identifies changes to the topology, and updates the topology database using the new tuples. *Id.* at 3:12–25.

1. *Illustrative Claim*

Claim 1 is the sole challenged independent claim and reads as follows:

1. In a network having interconnected nodes with data tuples that represent nodal connections, a method for mapping a network topology by identifying changes between an existing topology and a new topology, the method comprising:

creating a list of existing tuples from an existing topology

representing nodal connections of a network at a prior time;

creating a new list of a plurality of tuples for a topology of the

network at a current time, wherein the new list of tuples represent nodal connections of the network at the current time, and wherein each of the tuples comprises a host identifier, interface information, and a port specification;

receiving new tuples list that represent new nodal connections; and

comparing the list of existing tuples with the new tuples list to identify changes to the topology.

*Id.* at 13:41–59.

## 2. *Related Proceedings*

According to ServiceNow, the '411 patent has been asserted by HP in the Northern District of California in an action captioned *Hewlett-Packard Company v. ServiceNow, Inc.*, Case No. 14-CV-00570 BLF. Pet. 1.

### B. *The Asserted Grounds*

ServiceNow asserts the following grounds of unpatentability:

1. Whether claims 1 and 3 are unpatentable under 35 U.S.C. § 103 as having been obvious over Jones.<sup>2</sup>
2. Whether claims 1 and 3 are unpatentable under 35 U.S.C. § 103 as having been obvious over Tonelli.<sup>3</sup>

Pet. 3.

ServiceNow contends that Jones is prior art to the '411 patent under 35 U.S.C. § 102(e) (pre-AIA), while Tonelli qualifies under 35 U.S.C. § 102(b).<sup>4</sup> Pet. 3.

### C. *Claim Construction*

In an *inter partes* review, “[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears.” 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Tech., LLC*, No. 2014-1301, 2015 WL 4097949, at \*7–\*8 (Fed. Cir.

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<sup>2</sup> U.S. Patent No. 6,701,327 (Mar. 2, 2004) (Ex. 1003).

<sup>3</sup> U.S. Patent No. 5,821,937 (Oct. 13, 1998) (Ex. 1004).

<sup>4</sup> ServiceNow’s Petition recites 35 U.S.C. § 102(e) in connection with Tonelli, but this appears to be a typographical error; the explanation that follows (“it issued more than one year before the application filing date for the '411 patent”) is pertinent to prior art status under § 102(b), not (e).

July 8, 2015) (“Congress implicitly approved the broadest reasonable interpretation standard in enacting the [America Invents Act (“AIA”)],” and “the standard was properly adopted by PTO regulation”), *reh’g en banc denied*. Under this standard, we construe claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). We presume that claim terms have their ordinary and customary meaning. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning is the meaning that the term would have to a person of ordinary skill in the art in question.”) (internal citation and quotation marks omitted). A patentee may rebut this presumption, however, by acting as his own lexicographer, providing a definition of the term in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

ServiceNow proffers claim constructions for three claim terms: *tuple*, *topology*, and *host identifier*. Pet. 8–10. Upon review of the record, we determine that only the claim term *tuple* requires an express construction at this stage of the proceeding. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

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