

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner,

v.

UMBRA TECHNOLOGIES LTD.
Patent Owner.

U.S. Patent No. 11,146,632

Title: DATA BEACON PULSER(S) POWERED BY INFORMATION
SLINGSHOT

Inter Partes Review No.: IPR2024-00344

**PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY
RESPONSE**

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Pursuant to the Board’s Order dated June 11, 2024 (Paper No. 9), Petitioner hereby provides a preliminary reply addressing the interpretation and applicability of “*data beacons*” as raised by the Patent Owner (“PO”) in the Patent Owner’s Preliminary Reply (“POPR”) (Paper No. 6). PO attempts to incorporate an intended use “network system *for providing data beacons*” recited in the preamble in Claim 1¹ as a limitation and then applies a restrictive and unsupported construction to “*data beacon*” based entirely on the specification’s description, not of “*data beacons*, ” but rather “*data beacon pulsers*.”

A. PO improperly relies upon descriptions of “*data beacon pulsers*” in the Specification for the term “*data beacon*.”

PO proposes a construction of the term “*data beacon*” to mean “*a signal delivered via a one-way casting or one-way multicasting*.” POPR 11. As an initial matter, there is no description of a “*data beacon*” at all in the Specification of the ’632 Patent, and the term “*data beacon*” only appears in the ’632 Patent apart from the term “pulse(r)” twice, once in the Abstract, and once in the Summary of the Invention, neither of which support PO’s construction. To support its construction, PO reaches into the Specification and relies on the description of “*data beacon pulsers*” powered by a technology the patent calls “Information Slingshot”. EX-1001 1:29-37 (“**DBP** offers fast, efficient, and dependable **one way casting/multi-**

¹ Claim 1 is the only independent claim from which all remaining claims depend.

casting of information globally”); 3:36-38 (“**Slingshot one-way sending** (U.S. Provisional Patent No. 62/266,060 referenced herein) offers certain advantages to the reliable movement of data at near wire-speed”) and 5:21-51 (“It provides advantages over the current state of the art such as UDP **one-way multi-casting vs DBP utilizing slingshot**”). POPR 8-10. However, PO fails to provide any evidence that ties the term “data beacon pulser” to the recited *data beacon*. Specifically, PO argues that the use of slingshot provides several benefits including that it does not require responses or acknowledgements, and that it provides performance benefits over longer distances regarding speed and reliability. POPR 8-10. However, none of these features are recited in any of the Challenged Claims

B. The body of a Claim 1 fully and intrinsically sets forth all of the limitations of the claimed invention

With respect to Claim 1, the term *data beacon* is only recited in the preamble as an intended use, followed by the transitional term, “*comprising*”, e.g., “*A network system for providing data beacons, comprising:*” As an initial matter, it is generally understood that no patentable distinction is made by an intended use or result unless some structural difference is imposed by the use or result on the structure or material recited in the claim. “If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations,

then the preamble is not considered a limitation and is of no significance to claim construction.” MPEP 2111.02 II. The PO has not asserted, nor provided such a structural difference to the claimed network system resultant from the term “*for providing data beacons*.”

However, even if the term *data beacon* is considered to be a limitation, its meaning can be discerned from the body of the claim limitations. Looking to the claim body’s limitations, the claim recites only the writing and reading of *first data* within the claim node structure of the *network system*. It does not place limits on the nature of that *first data* requiring it to be delivered via one-way casting or multicasting as urged by PO.

PO’s assertion that the preamble is limiting because the feature was relied upon during prosecution, and that the specification makes clear that providing data beacon functionality is the fundamental purpose of the invention, is without factual support. POPR2. It is not apparent how the Examiner’s consideration that a “data beacon pulser” is “the technology upon which the invention is based” or that a search for “data beacon” and “pulse” in the same paragraph leads to the PO’s conclusion regarding reliance by the Examiner. POPR 5-7.

Instead, the Notice of Allowance clearly indicates the distinguishing features relied upon by the Examiner were recited in the body of the claim. In particular, with respect to the references found via an additional exploratory search related to

the technology discussed in the Specification, the Examiner stated “[h]owever, those references deal with mobile networks, and do not disclose any information about *read queues, write queues, or parallel file systems.*” EX-1002 p. 10 (emphasis added).

The Board should consider the clear statements in the prosecution history regarding distinguishing features of the claim that are affirmatively claimed limitations, and reject PO’s attempt to import features of a data beacon pulser into Claim 1.

C. The Board need not construe “data beacon”

The Petition describes that Agarwala includes a parallel disclosure to that of the ’632 Patent in that it is directed to the same problem and provided the same solution as the ’632 Patent, the only difference being that Agarwala uses different words to described the identical concepts described and claimed in the ’632 Patent. The architecture shown in FIG. 13 of the ’632 Patent is substantially identical to the architecture shown in FIG. 2 of Agarwala, including each node having a read/write queue and a parallel file system, where the read/write queue of a first node writes data from the write queue to a parallel file system of a second node, and the second note reads the data from the parallel file system of the second node and places it in the read queue of the second node. Pet. Pet. 1-4. The Petition also describes how the PO’s infringement allegations in the district court litigation (as

reflected in the claim chart attached to the Complaint) is consistent with the analysis in the Petition. Pet. 29-30. It was only in preparation for filing its POPR, that PO prepared a new claim chart in the district court (even though the litigation has been stayed), solely to support its arguments in the POPR regarding the “data beacon” limitation. POPR 14-15. Because Agarwala discloses the recited claim limitations without regard to whether *data beacon* recited in the preamble is a limitation, the Board need not construe the term.

June 17, 2024

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CERTIFICATION OF SERVICE ON PATENT OWNER

Pursuant to 37 C.F.R. §§ 42.6(e), the undersigned certifies that on June 17, 2024, a complete and entire copy of Petitioner's Reply to Patent Owner's Preliminary Response, was served by electronic mail to the Patent Owner's counsel at the following addresses:

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