

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

DH INTERNATIONAL LTD.,
Patent Owner.

Case IPR2024-01322

Patent No. 9,022,294

**PETITIONER'S PRE-INSTITUTION REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE**

The Board authorized Petitioner to file a five-page reply to Patent Owner's Preliminary Response (POPR) addressing Patent Owner's constructions of "activation cue," "data conveyance switching element," and "close proximity." Patent Owner's constructions should be rejected.

I. Patent Owner's Improper Narrowing of "Activation Cue" is Unsupported by the Intrinsic Record

Patent Owner argues the term "activation cue" "must be intended as a predetermined indicator," such as "a predetermined bit sequence" that is "recognized by the electronic device as an activation cue." POPR, 9-10. Patent Owner further argues that the activation cue is "not a message or signal recognized as a message or signal for other action." *Id.* But neither the claims nor the specification of the '294 Patent require such a narrow reading of the term "activation cue."

The '294 Patent discloses that the "activation cue is in the form of a data communication of a specific type which will be recognized by electronic device 10 as an activation cue." Ex. 1001, 9:24-27. Nothing in this description requires the activation cue to be "intended as" a predetermined indicator, or precludes messages or signals recognized as a message or signal for other action (including the Bluetooth signals of the prior art) from being an activation cue. *Kamstrup A/S v. Axioma Metering UAB*, 43 F.4th 1374, 1383-84 (Fed. Cir. 2022) (rejecting incorporation of a negative limitation where the claims and specification did not require as much). Thus, any recognizable type of data communication may function as an activation

cue. And while the specification characterizes the activation cue as being a “specific type” of data communication, specificity does not necessitate predetermination. Instead, the specification identifies a “predetermined bit sequence” as merely being one “example” of an activation cue. Ex. 1001, 9:24-27. Patent Owner’s construction improperly attempts to read “predetermined” from this non-limiting example into the claims, which is contrary to law and is unsupported by evidence. Accordingly, Patent Owner’s construction should be rejected, and Petitioner’s challenge to Patent Owner’s construction is proper. *See, e.g., Microsoft Corp. v. Uniloc 2017 LLC*, IPR2019-01188, Paper 27 at *19 (P.T.A.B. Nov. 4, 2020) (“[t]he petitioner may respond to any . . . new claim construction issues raised by the patent owner.”).

II. Patent Owner’s Construction of Data Conveyance Switching Element Contradicts the Express Disclosure of the ’294 Patent

Patent Owner argues the term *data conveyance switching element* “should be given its plain meaning, which is the switching of the data.” POPR, 10. This construction effectively reads out the structural “switching element” component of the term and conflicts with the express disclosure of the ’294 Patent. As explained in the Petition, the ’294 Patent explains that a switching element “can be any type of *device allowing data to be conveyed* according to alternate data conveyance operations,” such as “a series of instructions programmed onto [a] microchip” or a “decisional logical circuit,” and “can be a physical structure, a virtual program, or both.” Petition, 6 (citing Ex. 1001, 9:28-31, 9:40-41; Lipoff, ¶64); *see also* POPR at

11 (acknowledging the same). The '294 Patent further explains that the data conveyance switching element switches between inactive and activated states based on the receipt of an activation cue. Petition, 6 (citing Ex. 1001, 2:4-9, 4:18-23, 5:48-53; Lipoff, ¶64). Thus, the data conveyance switching element is not merely “switching of the data,” as Patent Owner contends. It is a device, such as “a series of instructions programmed onto [a] microchip” or a “decisional logical circuit,” e.g., “a physical structure, a virtual program, or both” that switches between inactive and activated states based on the receipt of an activation cue.

Patent Owner further contends that “states are assigned to what the switch is conveying” (i.e., the data), but column 15 of the '294 Patent further confirms that the switch itself is switched between active (first) and inactive (second) states, not the data:

If an activation cue is received by the portable electronic device 102 cue receiver, *the switching element within electronic circuit 116 will be assigned its first state. This means ... if it is in another state, it will be switched to its first state.* If no activation cue is received by the portable electronic device 102 cue receiver, *the switching element within electronic circuit 116 will be assigned its second state. This means ... if it is in another state, it will be switched to its second state.* Ex. 1001, 15:4-14 (emphasis added); *see also* 17:5-13. This is consistent with the plain language of claim 1, which recites that “*if said switching element is in said first state*, a first data conveyance operation will be initiated . . . and *if said switching*

element is in said second state, a second data conveyance operation will be initiated.” Ex. 1001, 19:34-40 (emphasis added). Thus, Patent Owner’s proposed construction contradicts the express disclosure of the ’294 Patent and should be rejected.

III. Patent Owner’s Construction of Close Proximity is Unduly Narrow

Claims 8 and 16 each recite that “the cellular phone is conveyed toward a *close proximity of the first external data exchange device*.” Ex. 1001, claims 8, 16 (emphasis added). Patent Owner advances multiple constructions of “close proximity,” including a “several-meter range,” “10 meters or less,” and “at least less than 30 meters.” POPR, 12 (citing Ex. 1001, 9:8-11, 15:55-57). But neither of Patent Owner’s cited passages limit the range to several, 10, or 30 meters.

The passage Patent Owner cites at column 9 merely acknowledges that the data exchange device can be “a computer, an interface machine such as an automatic teller machine, *or any other suitable data exchange device*.” Ex. 1001, 9:8-11 (emphasis added). It does not mention, let alone limit, “close proximity” to the specific ranges Patent Owner proposes. To the contrary, by stating that “any other suitable data exchange device” may be used, the specification suggests that “close proximity” for a given system depends on the selected data exchange device and its configuration.

The passage Patent Owner cites at column 15 does mention a several-meter range, but it uses three separate phrases to indicate that it is a non-limiting example: “[i]n one embodiment, the first data transceiver 120 is a proximity transceiver that allows data transmission within a limited range, *such as* within several meters *for example*.” Ex. 1001, 15:55-57 (emphasis added). Patent Owner should not be permitted to read this non-limiting example into its claims, especially given the ’294 Patent’s broader teachings that the data exchange device can be “any suitable data exchange device.” Ex. 1001, 9:8-11.

Patent Owner’s argument that the “range does not simply rely on the default range of Bluetooth,” (POPR, 12), is unsubstantiated and merely an attempt to narrow the claim scope to exclude the prior art. The argument also overlooks that devices capable of functioning at distances greater than several meters can also function properly at distances shorter than several meters. Accordingly, even if Patent Owner’s construction were adopted, institution would still be appropriate.

IV. Conclusion

For these reasons and those advanced in the Petition, Patent Owner’s arguments should be rejected and trial instituted.

Date: January 17, 2025

Respectfully Submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Petitioner's Reply to Patent Owner's Preliminary Response** was served electronically via email on January 17, 2025, in its entirety on the following:

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Patent Owner has consented to service by email.

Date: January 17, 2025

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