

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS AMERICA, INC.,

SAMSUNG ELECTRONICS CO., LTD.,

Petitioners,

v.

COBBLESTONE WIRELESS, LLC,

Patent Owner.

Case No. IPR2024-00606

U.S. Patent No. 7,924,802

PETITIONERS' PRELIMINARY REPLY

PO requests that the Board deviate from two general principles of claim construction to deny the Petition. Specifically, PO argues that (1) the preamble of claims 1 and 10 is limiting, **and** (2) the preamble’s “a wireless communication channel” term is limited to a single channel. To be clear, if PO is wrong on either point, it has presented no argument that claim 1 of the ’802 patent is invalid—nor can it. PO is nevertheless wrong that the prior art does not disclose a single wireless communication channel even under PO’s construction.

I. THE PREAMBLE OF CLAIMS 1 AND 10 IS NOT LIMITING

“Generally, a preamble is not limiting.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1292 (Fed. Cir. 2015). A preamble can be limiting if it “recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002). However, if the patentee “defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention,” the preamble is not limiting. *Id.*

PO argues, without expert testimony, that claims 1 and 10 “do[] not define a structurally complete invention in the claim body and, instead, the preamble’s ‘in a wireless communication channel’ is necessary to give life and meaning to the claim.” POPR 2, 12.

However, PO’s argument is belied by the fact that claim 17, which is an

apparatus claim with nearly identical scope as claim 10's method claim, does not recite "a wireless communication channel." Since "a wireless communication channel" is not structurally necessary for claim 17's apparatus, it is not necessary for claim 10's method, either. Similarly, Claim 1's recitation of simultaneously transmitting information across two frequency ranges is also found in claim 17, where again, there is no limitation that the transmission be "in a wireless communication channel." In addition, PO does not show that "a wireless communication channel" is "necessary to provide antecedent basis or that the applicant placed clear reliance on the preamble during prosecution." *Summit 6, LLC*, 802 F.3d at 1292.

The specification of the '802 patent also makes clear that "a wireless communication channel" is not a structurally necessary limitation for method claims 1 and 10. For example, Figures 6, 7A and 7B are the only figures that depict methods (and map to claims 1 and 10), yet their corresponding descriptions in the specification do not mention "a wireless communication channel." Ex. 1001, 5:27-31, 9:9-10:61. This indicates that the claim bodies of claims 1 and 10 are structurally complete. Accordingly, PO has not established that the "a wireless communication channel" limitation in the preambles of claims 1 and 10 is limiting.

II. "A" MEANS "ONE OR MORE"

In addition to arguing "a wireless communication channel" in the preamble

is limiting, PO further limits the phrase to mean a single channel. Yet, “[a]s a general rule, the words ‘a’ or ‘an’ in a patent claim carry the meaning of ‘one or more.’” *TiVo, Inc. v. EchoStar Commc’ns Corp.*, 516 F.3d 1290, 1303 (Fed. Cir. 2008). The “exceptions to this rule are extremely limited: a patentee must evince a clear intent to limit ‘a’ or ‘an’ to ‘one.’” *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008). Here there is no such clear intent, yet PO argues this principle “does not apply where the article ‘a’ appears before ‘comprising,’” relying on the Federal Circuit’s order in *Convolve, Inc. v. Compaq Computer Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016). POPR 5. PO misunderstands the holding in *Convolve*. In *Convolve*, the Court did not base its decision on the article “a” appearing before “comprising” but instead based its decision on the claim body’s use of “‘the processor,’ referring back to the ‘a processor’ recited in preamble” which “supports a conclusion that the recited user interface is ‘operatively working with’ the same processor to perform all of the recited steps.” *Id.* This was in contrast to claim 9, which recited “a processor” but not a subsequent “the processor,” and thus held it meant “one or more processors.” *Id.* Contrary to PO’s arguments, the Court did **not** attach any significance to the term “a processor” appearing before the word “comprising.” *Id.*; see also *Salazar v. AT&T Mobility LLC*, 64 F.4th 1311, 1317 (Fed. Cir. 2023) (“Claim 9 [in *Convolve*] ... had no subsequent reference to ‘the’ or ‘said’ processor [and so] we

interpreted ‘a processor’ to mean ‘one or more processors’).

Indeed, PO’s argument and mischaracterization of *Convolve* would, on its face, be such a broad exception that it would swallow the general rule that “a” means “one or more,” and is inconsistent with Federal Circuit cases that have construed the article “a” to mean more than one even when appearing before “comprising.” See, e.g., *Braintree Laboratories, Inc. v. Novel Laboratories*, 749 F.3d 1349, 1357 (Fed. Cir. 2014) (holding that construction of “a patient” in preamble to be a single patient “leads to [an] absurd result”).

Nor is PO’s argument consistent with the specification of the ’802 patent, which mentions that the received signal “may be processed in separate analog receiver **channels** and combined digitally.” *Id.*, 10:51-53; see also *id.* at 1:13-15 (“Communication systems generally contain **one or more** transmission **channels** to transmit data from the transmitter to the receiver.”).

Thus, it is clear that PO has not “evinced a clear intent to limit ‘a’ or ‘an’ to ‘one.’” *Baldwin Graphic Sys., Inc.*, 512 F.3d at 1342.

III. THE PRIOR ART DISCLOSES A SINGLE CHANNEL

Even assuming PO is correct that the preamble is limiting and “a wireless communication channel” is limited to a single channel, PO is nevertheless incorrect that a single wireless communication channel is not disclosed in the prior art presented in the Petition. As an initial matter, PO expressly declines to take any

position “on what may be required to perform the claimed method in ‘a wireless communication channel.’” POPR, 10 n.2. Thus, PO is in no position to argue that the prior art fails to meet “a wireless communication channel.”

The ’802 patent discloses that, to the extent it is comprehensible, “a communication channel” refers to a single transmission signal, and that it carries multiple “carrier frequenc[ies].” Ex. 1001, 10:63-66 (“[A] transmitter for sending the same data across a communication channel at two different RF carrier frequencies”); 11:18-20 (“[T]ransmit[ting] the digital data simultaneously as *an electromagnetic signal* using two different *carrier frequencies*.”). As explained in the Petition, the prior art likewise transmits multiple carrier frequencies using a single transmission signal.

For example, the Petition explains that Rick discloses each CDMA channel has a “carrier frequency” (Pet. 13 (quoting Ex. 1021, 3:21-22)) and transmitting “multiple CDMA signals *simultaneously*” on a single signal using “*an antenna*” (Pet. 13 (quoting Ex. 1021, 3:13-14, 4:50-51)). *See also* Ex. 1021, Abstract (“The RF transmit chain may process the analog signal to generate *an RF output signal*.”). Similarly, the Petition explains that Fernandez discloses transmitting data on “*a multi-carrier wireless signal*” using multiple “carrier frequenc[ies].” Pet. 79-80 (quoting Ex. 1005, ¶¶8-9). Thus, the cited grounds disclose a wireless communication channel even under PO’s construction.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on July 11, 2024, true and correct copies of the foregoing document were served in its entirety on the following parties via Electronic Mail

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