

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

YOU MAP INC.,
Patent Owner.

IPR2022-00568
Patent 10,616,727 B2

Before KEVIN F. TURNER, SHEILA F. McSHANE, and
JASON M. REPKO, *Administrative Patent Judges*.

REPKO, *Administrative Patent Judge*.

JUDGMENT

Final Written Decision on Remand
Determining All Claims Unpatentable
Denying Patent Owner's Motion to Amend
35 U.S.C. § 318(a)

I. INTRODUCTION

Snap Inc. (“Petitioner”) filed a petition requesting *inter partes* review of claims 1–20 of U.S. Patent No. 10,616,727 B2 (Ex. 1001, “the ’727 patent”). Paper 2 (“Pet.”, “Petition”). You Map Inc. (“Patent Owner”) filed a Preliminary Response. Paper 9.

On September 2, 2022, we instituted an *inter partes* review of all challenged claims based on all grounds in the Petition. Paper 10 (“Inst. Dec.”). Patent Owner filed a Response to the Petition. Paper 18 (“PO Resp.”). Petitioner filed a Reply. Paper 22 (“Reply”). Patent Owner filed a Sur-reply. Paper 26 (“Sur-reply”).

Patent Owner also filed a Motion to Amend to include claims 21–40 with a request for preliminary guidance. Paper 19 (“MTA”). Petitioner filed an opposition to the Motion to Amend. Paper 23 (“MTA Opp.”). The Board issued preliminary guidance on the Motion to Amend. Paper 25 (“MTA PG”). Petitioner filed a Reply. Paper 27 (“MTA Reply”). Patent Owner filed a Sur-reply withdrawing substitute claims 24, 26, 34, and 36. Paper 29, 2 (“MTA Sur-reply”).

An oral hearing was held on June 5, 2023. A transcript of that hearing has been entered into the record. Paper 36.

The Board entered a Final Written Decision determining that Petitioner had shown that claims 1–20 were unpatentable. Paper 37 (“FWD”), 59. The Board also granted Patent Owner’s contingent Motion to Amend for substitute claims 21–23, 25, 27–33, 35, and 37–40. *Id.* The Board disagreed with Petitioner that the subject matter recited in the substitute claims would have been obvious, as argued in the Opposition to the Motion to Amend. *Id.*

Petitioner appealed the Board’s granting of the Motion to Amend to the U.S. Court of Appeals for the Federal Circuit (“Federal Circuit”). Paper 38. The Board’s determination that original claims were unpatentable was not challenged on appeal. Paper 41 (“CAFC Dec.”), 4. The Federal Circuit determined “that the Board properly rejected [Petitioner’s] written description and single-reference obviousness challenges but that the Board erred in its analysis of the motivation to modify Feldman’s request to include a ‘current zoom level,’” as set forth in Petitioner’s Opposition to the Motion to Amend. *Id.* at 12. Thus, the Federal Circuit affirmed the Board’s decision in part but remanded to the Board for further proceedings relating to the amended substitute claims. *Id.*

As authorized by the Board, Patent Owner filed a Brief (Paper 44, “PO Remand Br.”), Petitioner filed a Reply (Paper 45, “Remand Reply”), and Patent Owner filed a Sur-reply (Paper 46, “Remand Sur-reply”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued under 35 U.S.C. § 318(a). For the reasons that follow, we deny Patent Owner’s contingent Motion to Amend. Our decision that original claims 1–20 are unpatentable is unaffected by this decision. *See* FWD 4.

A. The ’727 Patent

The ’727 patent relates to displaying social-network posts on a map. Ex. 1001, 3:32–41. To fit numerous posts on a mobile device’s display, the disclosed system displays some posts more prominently than others. *Id.* at 3:42–45. For example, some posts may be larger or a different color than others. *Id.* at 3:52–58. Also, the system may aggregate multiple posts. *Id.* at 12:56–57.

Figure 3C, below, shows an example embodiment.

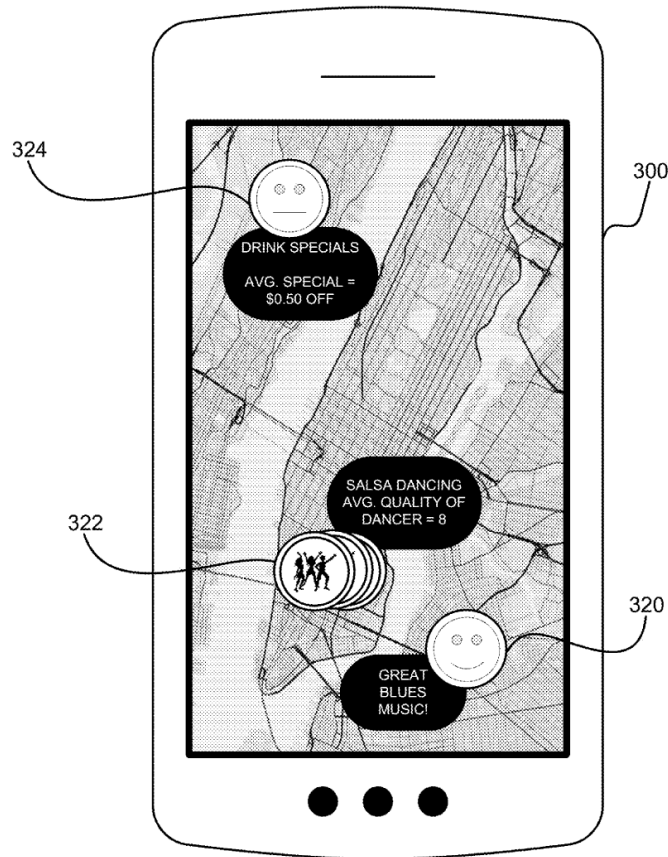


Figure 3C, above, shows client device 300 with symbols 320, 322, and 324 on a map. Ex. 1001, 11:23–28. Symbols 320, 322, and 324 correspond to social-media posts. *Id.* The symbols may represent an aggregate of multiple posts, and a post’s text may be altered to create the displayed text.

Id. at 11:23–31. The decision to display a post can be based on rankings associated with particular attributes. *Id.* at 11:41–47. For example, in the screen shown in Figure 3C, above, posts about drink specials, salsa dancing, and blues music are displayed, whereas those about Broadway shows are not. *Id.* at 11:47–51.

The system displays the posts in response to a request from a client device. Ex. 1001, 15:10–12; 16:6–22. The request may include information about the client device’s display, including current zoom level. *Id.* at 7:3–20;

15:12–15. The system uses this information to filter recent social-media posts for display. *Id.* at 15:23–26.

B. Claims

Claim 21, below, is a substitute for claim 1:

21. A system for providing location information on a social network, comprising:

a computer processor; and

a social mapping module executing on the computer processor and configured to enable the computer processor to:

receive, from a client device, a request for one or more social media posts, wherein the request includes ~~[screen attribute information about]~~ a current zoom level of a display of the client device, geographic location information, and an identification of a requesting account of the social network;

identify a set of temporally recent social media posts based on the ~~[screen attribute information]~~ current zoom level of the display of the client device and the geographic location information;

apply, by the computer processor, two sets of grouping criteria to the set of social media posts to generate a suggested group, wherein:

the suggested group is a subset of the set of social media posts, and

applying the two sets of grouping criteria comprises:

generating a combined ranking based on:

ranking each social media post of the set of social media posts according to a first customized score for each social media post, wherein the first customized score is based on a first set of preference factors, corresponding to the requesting

account, applied to a general score of each social media post, and

ranking each social media post of the set of social media posts according to a second customized score for each social media post, wherein the second customized score is based on a second set of preference factors, corresponding to the requesting account, applied to the general score of each social media post, and

selecting, based on the combined ranking, the subset of the set of social media posts for inclusion in the suggested group, wherein the selecting comprises excluding at least one social media post of the set of social media posts from inclusion in the suggested group based on the combined ranking; and

provide, in response to the request, the suggested group for display by the client device.

MTA 27–28.

II. ANALYSIS

A. *Level of Ordinary Skill in the Art*

Petitioner asserts that a person of ordinary skill in the art (“POSA”) “would have had a bachelor’s degree in electrical engineering, computer science, or a related field, plus two years’ work or research experience with location-based content delivery and/or visualization.” Pet. 5 (citing Ex. 1003 ¶¶ 19–22). Petitioner also asserts that “[m]ore education could substitute for experience and vice versa.” *Id.*

Patent Owner does not contest Petitioner’s proposed level of ordinary skill in the art. *See* PO Resp.; Sur-reply. Patent Owner’s expert, Dr. Shamos,

testifies that he “generally agree[s]” with Petitioner’s proposed articulation, and provides substantially the same expression of the level of ordinary skill in the art. Ex, 2003 ¶¶ 30–31; *see* FWD 6–7.

In this Decision, we apply Petitioner’s proposed definition.

III. CONTINGENT MOTION TO AMEND

A. *Substitute Claims*

Patent Owner filed a Motion to Amend proposing to substitute original claims 1–20 with claims 21–40, contingent upon a finding of unpatentability of the original claims. MTA 1. Patent Owner withdrew substitute claims 24, 26, 34, and 36. MTA Sur-reply 2. Thus, we only consider claims 21–23, 25, 27–33, 35, and 37–40 to be part of the Motion to Amend.

Patent Owner’s Motion to Amend only replaced “screen attribute information about” with “a current zoom level of.” *See* MTA 5–8. Thus, substitute claim 21 recites a request that “includes *a current zoom level of* a display of the client device,” and a module that enables a processor to “identify a set of temporally recent social media posts based on *the current zoom level of* the display of the client device.” *See id.* at 27 (emphasis added). The other substitute independent claims recite similar features. *See id.* at 31 (claim 31), 34 (claim 40). Thus, all substitute claims require receiving a request that includes the current zoom level. *See* FWD 48.

B. *Patentability of the Substitute Claims*

The Board held that the original claims were unpatentable over the Feldman-Jackson combination. FWD 39. In the Opposition to the Motion to

Amend, Petitioner argued that (1) Feldman¹ teaches the newly recited “current zoom level” in the substitute claims or (2) adding the “current zoom level” to the recited search request would have been obvious in view of the knowledge of one of ordinary skill in the art. MTA Opp. 10–11.

The Board concluded that Petitioner did not show that the substitute claims were unpatentable under either rationale but that Patent Owner’s Motion to Amend satisfied all other requirements. FWD 52–54.

The Federal Circuit held that the Board’s conclusion regarding the rationale based on Feldman alone, that is, that Feldman did not teach sending a “current zoom level” in a request, was supported by substantial evidence. CAFC Dec. 6. As for the rationale based on Feldman and the knowledge of a POSA, the Federal Circuit “vacat[ed] the Board’s finding that there is no motivation to modify Feldman’s request to include a ‘current zoom level’ based on any of Snap’s seven prior art references teaching requests relating to zoom levels.” *Id.* at 10. According to the Federal Circuit, “the undisputed evidence established a motivation to modify the radius in Feldman’s search request to instead be based on the zoom level parameter disclosed in the prior art,” and “[o]n remand, the Board’s consideration of obviousness must be consistent with this conclusion.” *Id.* at 10–11.

In this remand, the only issue left to resolve with respect to Patent Owner’s Motion to Amend is Petitioner’s argument that the proposed substitute claims 21–23, 25, 27–33, 35, and 37–40 would have been obvious over the Feldman-Jackson combination in view of the knowledge of a person of ordinary skill in the art as evidenced by the seven prior art references asserted by Petitioner. MTA Opp. 8–9, 11–25.

¹ Feldman, US 2015/0334077 A1, is Exhibit 1005.

C. *Waiver and Forfeiture*

1. *Petitioner's Arguments*

Petitioner argues that there are no further factual findings to be made. Remand Reply 7. Petitioner argues that the Federal Circuit “noted that ‘[t]he Board agreed with Snap that prior art references ‘explain that it was known to specify the zoom level’ in a search request,” which means that “the Federal Circuit explicitly accepted and did not vacate” the Board’s finding that the references disclose this feature. *Id.* at 5–6 (citing Paper 41, 7). According to Petitioner, “The **only** aspect of Petitioner’s obviousness case with which the Board disagreed—and the **only** aspect that [Patent Owner] disputed—was motivation to combine.” *Id.* at 6. Petitioner argues that the Federal Circuit affirmed the Board’s decision in every other respect. *Id.* at 9.

According to Petitioner, Patent Owner has forfeited or waived the argument that the subject matter recited in the substitute claims would have been obvious. Remand Reply 8–17. Petitioner points out that Patent Owner chose not to file a response to the Board’s Preliminary Guidance. *Id.* at 12. In Petitioner’s view, Patent Owner cannot raise the argument that the prior-art references “do not disclose the disputed limitation” for the first time after remand because Patent Owner did not do so during the IPR. *Id.* at 13–17 (citing *Wireless Protocol Innovations, Inc. v. TCT Mobile, Inc.*, No. 2021-2112, 2022 WL 2813743, at *4–5 (Fed. Cir. July 19, 2022)).

Petitioner also argues that Patent Owner’s arguments are precluded by the law of the case because (1) the Board held that all limitations in the original claims were met by the Feldman-Jackson combination, a decision that was not appealed, and (2) the Federal Circuit affirmed the Board’s findings about the *current-zoom-level* limitation added in the substitute claims. Remand Reply 10 (citing *Transocean Offshore Deepwater Drilling*,

Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340, 1348 (Fed. Cir. 2012)). Thus, Petitioner argues that the Board cannot consider at this stage Patent Owner’s arguments about whether the combined references teach every limitation of the substitute claims. *Id.* at 11.

2. *Patent Owner’s Arguments*

Patent Owner argues that the Federal Circuit did not enter judgment of unpatentability, committing “that determination to the Board in the first instance when it vacated ‘the Board’s finding that there is no motivation to modify Feldman’s request to include a “current zoom level”’ and remanded for ‘consideration of obviousness’ consistent with its conclusion.” Remand Sur-reply 4. In Patent Owner’s view, “This necessarily requires the Board to consider [Patent Owner]’s arguments about what the references disclose (or fail to disclose) in the context of the claimed combination.” *Id.* Patent Owner argues that the Federal Circuit’s “remand necessarily encompasses a complete assessment of whether the proposed combination teaches every claim limitation—not merely a ministerial entry of a finding of unpatentability.” *Id.* at 5.

3. *Analysis*

We agree with Patent Owner that, on remand, the Board must undertake “a complete assessment of whether the proposed combination teaches every claim limitation.” Remand Sur-reply 5.

The obviousness issue in the Final Written Decision turned on the lack of a reason to combine the references. FWD 56. The Federal Circuit “vacat[ed] the Board’s finding that there is no motivation to modify Feldman’s request to include a ‘current zoom level’ based on any of Snap’s seven prior art references teaching requests *relating to* zoom levels.” CAFC Dec. 10 (emphasis added). Petitioner interprets the Federal Circuit’s

statement to mean that “the Federal Circuit again affirmed that the references *do* teach ‘to include a “current zoom level”’ in a ‘request’ sufficient similar to Feldman’s request as to motivate” the proposed combination. Remand Reply 9–10 (quoting CAFC Dec. 10). We disagree.

The Federal Circuit did not state that all seven references include a zoom level in a request; the Federal Circuit’s statement was directed only to the Board’s finding on the motivation to modify Feldman’s request. CAFC Dec. 10. Likewise, in the next sentence, the Federal Circuit referred to “zoom level parameters disclosed in the prior art” (*id.*)—not search requests including a current zoom level, as Petitioner argues (Remand Reply 9–10).

The Board’s Final Written Decision explains that Petitioner’s challenge fails even if Petitioner’s summary of the references were correct because Petitioner did not present a sufficient reason to modify Feldman to include a current zoom level in its search request. FWD 56. The Federal Circuit vacated this finding specifically and contemplated that there would be a “consideration of obviousness” on remand. CAFC Dec. 10–11. That consideration requires more than determining whether any one reference teaches a current zoom level and a search, generally. *See* FWD 56 (quoting MTA Reply 10). Here, Petitioner’s challenge is based on modifying the Feldman-Jackson combination. So the Board must determine on remand whether the Feldman-Jackson combination in view of knowledge of a POSA meets the claim limitations at issue.

We also disagree to the extent that Petitioner argues that the Board is precluded from considering additional arguments on the relevant issues on remand. The Board’s preliminary guidance on the Motion to Amend stated that Petitioner’s obviousness rationale was based on convenience and this reason was not sufficiently supported:

On this record, Petitioner’s obviousness rationale for each cited reference lacks a sufficient explanation of why one of ordinary skill in the art would have added the zoom levels in the prior art to Feldman. *See id.* At most, Petitioner argues that it would be convenient to “specify the area the user desires to search for content” in this way. *Id.* at 14. But, on this record, Petitioner has not sufficiently explained why it would be convenient to do so in Feldman. *See id.* Nor has Petitioner sufficiently explained how or why the prior-art features confer this convenience. *See id.*

MTA PG, 13. Because the Board’s conclusion turned on the lack of sufficient explanation, the briefing that followed was limited to Petitioner’s obviousness rationale. *See, e.g.,* MTA Reply 9–12, MTA Sur-reply 1–12. Under these specific circumstances, we determine that it would be procedurally fair to fully consider the arguments on remand about whether the cited prior art teaches or suggests the limitations recited in the substitute claims. And, as discussed above, the Federal Circuit has directed the Board to consider obviousness. CAFC Dec. 10–11.

D. The Merits

1. Claim 21

a. Subject Matter at Issue

Substitute claim 21 recites, in relevant part,

receive, from a client device, a request for one or more social media posts, wherein the request includes ~~[screen attribute information about]~~ a current zoom level of a display of the client device, geographic location information, and an identification of a requesting account of the social network;

identify a set of temporally recent social media posts based on the ~~[screen attribute information]~~ current zoom level of the display of the client device and the geographic location information

MTA 27.

Here, we must determine whether Petitioner has shown that the subject matter in the substitute claims, which replace “screen attribute information” with “a current zoom level,” would have been obvious over the Feldman-Jackson combination in view of the knowledge of one of ordinary skill in the art. MTA Opp. 9–12.

b. Feldman

Feldman’s Figure 6, below, shows a user interface illustrating perimeter 303. Ex. 1005, Fig. 6.

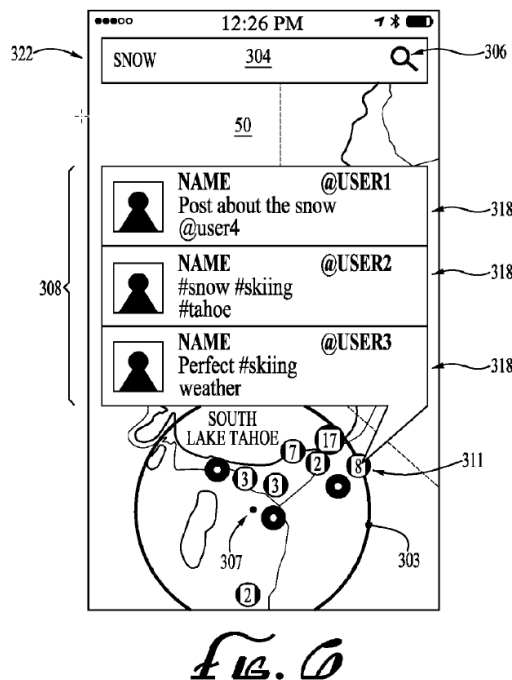


Fig. 6

Figure 6 shows perimeter 303 as a circle surrounding geoposts. *Id.* ¶ 82. Perimeter 303 limits the area in which geoposts can be discovered. *Id.* On the other hand, Feldman teaches that the user can change the map’s zoom perspective. *Id.* ¶ 88. For example, the user can move slider 300, click plus to zoom in or minus to zoom out, and tap a scale. *Id.*

Here, Feldman’s zoom level and perimeter 303 are different things. As the Federal Circuit explained, “The Board required Snap to show the ‘current zoom level’ was included in a search request, and determined this

parameter simply was not in Feldman’s request.” CAFC Dec. 6 n.3. Rather, Feldman discloses sending the perimeter 303 and the radius in the search request, not the current zoom level:

Perimeter 303 can be included in the search request sent to the server. In a possible embodiment, a radius previously specified by area size value 350 (FIG. 3B) can be included with the search request to the server.

Ex. 1005 ¶ 62.

c. The Knowledge of One of Ordinary Skill in the Art

Petitioner argues that “it was well known to include the display’s ‘current zoom level’ in a request for social-network posts or other content on a map.” MTA Opp. 11 (citing Second Williams Decl. ¶ 79). Petitioner provides seven additional references with teachings related to a zoom level. *See id.* at 11–15 (citing Ex. 1028 (“Badger”), Ex. 1029 (“Bergboer”), Ex. 1030 (“Jakobson”), Ex. 1031 (“Marra”), Ex. 1032 (“O’Clair”), Ex. 1033 (“Smith”), Ex. 1016 (“Soni”)). Petitioner argues,

Even if Feldman had not expressly taught or suggested including the “current zoom level” in the request for posts, [a person of ordinary skill in the art] would have been motivated to adapt Feldman’s request to include the “current zoom level” because, as these references illustrate, doing so was a known technique that would be predictably applied in Feldman’s system in the same way as in other systems to conveniently specify the area the user desires to search for content.

Id. at 14; *see also* MTA Reply 10.

Upon review of the record, we determine that Petitioner has shown that it was known to include the display’s “current zoom level” in a request for social-network posts or other content on a map and, when combined with Feldman and Jackson, at least some of the seven prior art references teach or suggest all limitations of the substitute claims. Our reasoning follows.

d. Map Curation

i. Patent Owner's Argument

Patent Owner argues that the prior art cited by Petitioner does not allow the user to “curate their own map.” *See, e.g.*, PO Remand Br. 16 (arguing against Berger), 18 (arguing against Bergboer), 20 (arguing against Jakobson), 21 (arguing against Marra), 22 (arguing against O’Clair), 23 (arguing against Smith), 24 (arguing against Soni). Specifically, Patent Owner argues that curating a map is reflected in substitute claim 21 because the claimed subject matter uses the current zoom level and displays posts based on the parameter. *See, e.g.*, PO Remand Br. 16 (citing Ex. 1001, 4:64–65). The cited part of the challenged patent explains:

Also, in various embodiments described herein, a user may be able *to curate their own map*. For example, a user may create a plurality of channels which may, or may not, be combined to sus out venues and/or activities they may not have otherwise known about. For example, a user can create a channel associated with Japanese culture and shows museums, concerts, plays, festivals, and other events and/or locations that are related to Japanese culture.

Ex. 1001, 4:64–5:4 (emphasis added).

ii. The recitation of a current zoom level does not limit the claim to only those methods that allow the user to curate their own map.

The concept of “allowing the user to curate their own map” is not specific to the current zoom level recited in claim 21 in the way that Patent Owner argues. *See* PO Remand Br. 16. We agree with Petitioner that the quoted passage refers to the user’s ability to create channels. Remand Reply Br. 26. Specifically, the various embodiments allow the user to curate their own map by creating themed channels. Ex. 1001, 4:64–5:17. For example, the map may show a user various karaoke bars around the city in

one channel, and the user can have another channel for after-hour clubs. *Id.* at 5:4–17. The rest of the paragraph explains that the system can combine these channels to filter karaoke bars open during certain hours, for example. *Id.* The channels exist apart from the current zoom level. *See, e.g. id.* at 4:64–5:17.

Thus, we disagree with Patent Owner that, because the claimed subject matter uses the current zoom level and displays posts based on the parameter, Petitioner must show that the prior art teaches or suggests allowing the user to curate their own map. PO Remand Br. 15–16.

iii. If allowing the user to curate their own map is connected to another limitation, that limitation has been shown to be met by the teachings of Feldman and Jackson.

To the extent that Patent Owner is suggesting that the user-curated map feature is connected to another limitation, we have already determined that any such limitation is taught by the Feldman-Jackson combination. The original claim recited “receive, from a client device, a request for one or more social media posts . . . identify a set of temporally recent social media posts” In the Final Written Decision, the Board determined that Petitioner has shown that this was met by the Feldman-Jackson combination. *See* FWD 44. That determination was not challenged on appeal. CAFC Dec. 4. Substitute claim 21 only adds a current zoom level to the request. MTA 27–28. Patent Owner does not provide, nor do we see, a reason that the current zoom level would have allowed the user to curate their own map in a way that would not otherwise be achievable by the request in the original claim. *See* PO Remand Br.; Remand Sur-reply.

Thus, to the extent that the user-curated map feature refers to the original claim limitations, the Board has previously determined that those limitations are met by the Feldman-Jackson combination. *See* FWD 44.

e. Badger

i. Petitioner’s Opposition to the Motion to Amend

According to Petitioner, “**Badger (Ex. 1028)** describes techniques for an electronic device to request ‘map data’ from a server, together with ‘content items’ for display on the map.” MTA Opp. 11. As for the request, Petitioner quotes Badger’s discussion of the “map space request”: “Each map space request received by the map server 112 includes a *zoom level* parameter defining the level of detail for the map 109.” *Id.* (quoting Ex. 1028 ¶ 34). Petitioner argues, “POSAs would have been motivated by these teachings to include the display’s zoom level in the request to identify a map area and corresponding posts to display in Feldman’s system.” *Id.* at 11–12 (citing Ex. 1027² ¶ 80).

ii. Patent Owner’s Remand Brief

Patent Owner argues that Badger is different from the substitute claims because Badger’s focus is advertisements, not social-media posts. PO Remand Br. 14–16. Patent Owner argues that Badger’s “map space request” is used to request map data or map space and the zoom-level parameter defines the level of map details for that space. *Id.* at 15. In Patent Owner’s view, “Badger’s advertiser control over what is or is not displayed, however, demonstrates that the selection of advertisements is based on the ‘threshold zoom level’ provided by the advertiser, *not any parameter in the map*

² Exhibit 1027 is the second Declaration of David H. Williams.

request, thus not allowing the user ‘to curate their own map.’” *Id.* at 16 (citing Ex. 1001, 4:64–65).

iii. Analysis

Patent Owner’s argument amounts to an individual attack on Badger and fails to consider the teachings of Feldman and Jackson. Here, Petitioner relies on Feldman and Jackson to teach every limitation except for the request including the zoom level. MTA Opp. 14. It is undisputed that the Feldman-Jackson combination teaches all other limitations. Petitioner proposes modifying the Feldman-Jackson combination by using the current zoom level in the request. *See id.* at 11–12. Yet Patent Owner’s argument focuses on how Badger uses the request to conduct the search, which does not squarely address how Petitioner proposes to use Badger in combination with Feldman and Jackson. *See* PO Remand Br. 14–16.

In the proposed combination, Petitioner relies on Badger for the limited purpose of using the “display’s zoom level in the request to identify a map area and corresponding posts to display in Feldman’s system.” MTA Opp. 11–12 (citing Ex. 1027 ¶ 80). Petitioner has adequately shown that including Badger’s zoom level in Feldman’s request would have achieved this because Badger teaches “the number of advertisements 103 presented in the map space 202 can also be defined in part by the zoom level submitted by the user devices 110.” Ex. 1028 ¶ 34, *cited in* MTA Opp. 11. Petitioner argues that Badger’s “other forms of content items” can include Feldman’s social-media posts. MTA Opp. 11 (citing Ex. 1028 ¶ 19). Badger teaches that the content items can be graphical, text, images, audio, or some combination of these. Ex. 1012 ¶ 19. Likewise, Feldman’s social-media posts contain at least text. *See* Ex. 1005, Fig. 3D–3E. Although Badger describes the content items as being advertisements or sponsored (Ex. 1012

¶ 19), there is nothing on the record that suggests that the purpose behind a social-media post or corresponding text (e.g., for advertisement or based on sponsorship) is relevant to the way the current zoom level is used. *Id.*

It is undisputed that Feldman and Jackson teach the original identifying step that recited screen attribute information. As Petitioner argues, “The zoom level affects the filtering and is part of the curating, because the initial full set has more or fewer posts depending on the geographic area encompassed at the zoom level, and thus more or fewer posts need to be filtered out to fit the display depending on the zoom level.” Remand Reply 27. Petitioner’s combination does not depend on bodily incorporation of Badger’s “threshold zoom level” into the Feldman-Jackson combination—nor does the test for obviousness require this. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Because it amounts to an individual attack on Badger that does not squarely address the combined teachings, Patent Owner’s argument is unpersuasive.

In sum, Petitioner has shown that replacing Feldman’s radius with Badger’s zoom level meets all the limitations of the claim considered in the context of the Feldman-Jackson combination. Also, the evidence shows a motivation to modify the radius in Feldman’s search request to instead be based on the zoom-level parameter disclosed in Badger. *See Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380–81 (Fed. Cir. 2023) (“There is a motivation to combine when a known technique ‘has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way,’ . . . using the ‘prior art elements according to their established functions.’”) (citing *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007)).

For at least this reason, we determine that Petitioner has shown that substitute claim 21 is unpatentable over Feldman, Jackson, and knowledge of one of ordinary skill in the art. *See Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1337 (Fed. Cir. 2020) (“[U]nder 35 U.S.C. § 103, the obviousness inquiry turns not only on the prior art, but whether ‘the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious . . . to a person having ordinary skill in the art to which the claimed invention pertains.’”).

f. Bergboer, Jakobson, and Marra

Petitioner argues that Bergboer uses a “map request” including a zoom level to select a part of a map (MTA Opp. 12), Jakobson transmits user input containing a zoom level to a map server for map data and corresponding social-networking content (*id.*), and Marra sends a request to modify the displayed map region as a request to zoom out (*id.* at 13).

Patent Owner does not dispute that these references teach or suggest a request with a zoom level. *See* PO Remand Br. 16–21. Instead, Patent Owner’s arguments are directed to how and what content is retrieved: Bergboer’s zoom is a display characteristic of the client device, which is used to retrieve photographs (*id.* at 17–18), Jakobson uses a threshold-based approach for retrieving advertisements (*id.* at 19–20), and Marra’s requests display geographic regions instead of social media posts (*id.* at 20–21). For all three references, Patent Owner argues that the user is not able to curate their own map. *See id.* at 18 (Bergboer), 20 (Jakobson), 21 (Marra).

We disagree with Patent Owner’s arguments for reasons similar to those discussed in Section III.D.1.d. Specifically, we disagree with Patent Owner to the extent that “allowing the user ‘to curate their own map’” adds a limitation not otherwise already reflected in the original claim, which is

met by the Feldman-Jackson combination. PO Remand Br. 16; *see supra* Section III.D.1.d.

Rather, Petitioner is correct that “[t]he zoom level affects the filtering and is part of the curating, because the initial full set has more or fewer posts depending on the geographic area encompassed at the zoom level, and thus more or fewer posts need to be filtered out to fit the display depending on the zoom level.” Remand Reply 27. Like Badger, Bergboer, Jakobson, and Marra all show that it was known to include a current zoom level in a request for content, and it would have been obvious to modify the Feldman-Jackson combination. Thus, Patent Owner’s arguments against Bergboer, Jakobson, and Marra are unpersuasive for reasons similar to those discussed in connection with Badger. *See supra* Section III.D.1.e.

For this additional reason, we determine that Petitioner has shown that substitute claim 21 is unpatentable over Feldman, Jackson, and knowledge of one of ordinary skill in the art.

g. O’Clair

According to Petitioner, when O’Clair’s user changes the scale of zoom level view 110 by zooming in or out, the server provides a corresponding updated zoom level view 110 of the map document. MTA Opp. 13 (citing Ex. 1032, 3:16–38, 6:25–7:42). Petitioner argues that a person of ordinary skill in the art would understand that this involves sending a request to the server with the zoom level. *Id.* (citing Ex. 1027 ¶ 84). According to Petitioner, “The server then ‘retrieve[s] businesses that are located within the boundaries of the entirety of zoom level map view 110 selected by the user’ for presenting on the map.” *Id.* (citing Ex. 1032, 3:39–58)

In Patent Owner’s view, Petitioner’s O’Clair argument is insufficiently supported and based on conclusory expert testimony. PO Remand Br. 21–22. According to Patent Owner, O’Clair teaches that latitude and longitude define the map view’s boundaries. *See* Ex. 1032, 7:5–9. We agree.

The cited passages from O’Clair lack a search request with the current zoom level. *See* Ex. 1032, 3:16–58, 6:25–7:42, *cited in* MTA Opp. 13. Rather, as for the search query, O’Clair explains that the user provides a “search query related to a type of business that the user desires to locate *within a geographic region bounded by zoom level view 110 of the map document.*” *Id.* at 3:26–29 (emphasis added). Although O’Clair teaches a user sending a search query related to a business, the zoom level view 110 is already established at that point, so there is no indication that the zoom level is in that query. *Id.* Indeed, the other cited part from O’Clair explains that the user can navigate to a region of the map. *Id.* at 6:25–7:42, *cited in* MTA Opp. 13. Petitioner’s argument that O’Clair must teach the search query with the zoom level (MTA Opp. 13) contradicts O’Clair’s teachings (Ex. 1032, 6:25–7:42) and is only supported by conclusory testimony from its declarant David H. Williams, which merely repeats Petitioner’s assertion (Ex. 1027 ¶ 84).

Thus, we agree with Patent Owner that Petitioner has not provided sufficient arguments and evidence showing that O’Clair provides support for a conclusion that it was known in the art to include zoom levels in requests for content. *See* PO Remand Br. 22–24.

h. Smith and Soni

Petitioner does not identify any requests for social-media posts in either Smith or Soni including the current zoom level. Instead, Petitioner's opposition only identifies zoom-level parameters:

Smith (Ex. 1033) describes searching for information within an “area of the map that is in the viewing area.” Smith, [0147]. The information can include other users' posts/ratings about locations on the map. *Id.*, [0063], [0068]. “When the user ‘zooms in’ a portion of the map..., the screen automatically refreshes and the search is automatically performed again but this time limited to the area of the map that has been enlarged.” *Id.*, [0147]. Ex. 1027, [0085].

Soni (Ex. 1016) describes showing social media posts on a map, wherein the user can zoom in or out to change the area of the map to search for posts. Soni, [0005], [0036], [0084]-[0085]; Ex. 1027, [0086]; Ex. 1026, 179-182 (agreeing Soni discloses zooming in/out to adjust map region displayed and posts received).

MTA Opp. 14.

Patent Owner argues that Smith and Soni lack requests including the current zoom level. *See* PO Remand Br. 22–24.

Because Petitioner's analysis does not discuss requests for social-media posts including a current zoom level (MTA Opp. 14), we agree with Patent Owner that Petitioner has not provided sufficient arguments and evidence showing that Smith and Soni support its conclusion that it was known in the art to include the current zoom level in requests for content. *See* PO Remand Br. 22–24.

Even so, Petitioner's argument is sufficiently supported by Badger, Bergboer, Jakobson, and Marra. *See supra* Sections III.D.1.e and III.D.1.f. Thus, Petitioner has shown that substitute claim 21 is unpatentable.

2. *Claims 31 and 40*

Substitute claims 31 and 40 recite additional subject matter not found in claim 21: Claim 31 recites that the request also includes “a pan location” (MTA 31) and claim 40 recites that the request also includes “a user’s viewport” (*id.* at 34) in addition to the current zoom level. For all the reasons discussed with respect to claim 21, Petitioner has shown that it would have been obvious to add a current zoom level to Feldman’s request. *See supra* Section III.D.1.

As for the “pan location” in claim 31, Petitioner argues that “Feldman’s ‘designated geolocation 307’ and ‘perimeter 303’ each meet the ‘pan location’ limitation because moving either or both sets the search area and pans the map.” MTA Opp. 18.

Patent Owner does not rebut this argument.

We determine that Feldman supports Petitioner’s argument that pan location is taught by centering the map upon a specific point. MTA Opp. 17–18 (citing Ex. 1005 ¶¶ 86–88); *see* MTA PG 15. Thus, Petitioner has shown that substitute claim 31 is unpatentable.

As for the “viewport” in claim 40, Petitioner argues that the “Petition’s combinations meet the ‘user’s viewport’ limitation in the same way they meet the original ‘screen attribute information’ limitation,” because “‘Perimeter 303’ meets all the requirements of a ‘viewport.’” MTA Opp. 21. According to the Second Declaration of David H. Williams:

Dr. Shamos stated at his deposition that a “viewport” used in the proposed substitute claims could take any shape, including a triangle or circle. Shamos Deposition Transcript (Ex. 1026) at 159:7–163:10. Further, Dr. Shamos stated at his deposition that a “viewport” could be a part of a screen, and more than one “viewport” can be on the same screen. *Id.* at 168:22–170:22. I agree that a “viewport,” under that term’s ordinary and

customary meaning, can be any shape and can be less than an entire screen.

Ex. 1027 ¶ 28. Petitioner asserts that, like a viewport, Feldman's perimeter 303 defines area 305 of the map. MTA Opp. 21 (citing Pet. 22).

Patent Owner does not rebut these arguments.

We agree with Petitioner that Feldman's perimeter 303 defines area 305 of the map and by doing so, teaches a viewport. *See* MTA Opp. 20–21. Also, Patent Owner's declarant asserted that the plain and ordinary meaning of "viewport" is "an area of a display in which content can be viewed."

Ex. 2003 ¶ 42, *cited in* MTA Opp. 20–21. Even under this definition, we agree with Petitioner that Feldman teaches a viewport for at least the reason that "[a]rea 305 can limit the interactive areas by which posts can be discovered within the perimeter 303." Ex. 1005 ¶ 50, *cited in* Pet. 22.

Thus, Petitioner has shown that substitute claim 40 is unpatentable.

3. *Claims 22, 23, 25, 27–30, 32, 33, 35, and 37–39*

Substitute claims 22, 23, 25, 27–30, 32, 33, 35, and 37–39 have no limitations added by amendment compared to the original claims and recite subject matter that would have been obvious over the Petition's combinations for the reasons discussed in the Final Written Decision. *See* MTA 28–30, 32–34; MTA Opp. 15, 20. Thus, Petitioner has shown that these substitute claims are unpatentable.

IV. CONCLUSION

Petitioner has shown that all substitute claims are unpatentable. Patent Owner's contingent Motion to Amend is denied.

Outcome of Decision on Federal Circuit Remand:

Claim(s)	35 U.S.C. §	Reference(s)/ Basis	Claim(s) Shown Unpatentable	Claim(s) Not shown Unpatentable
1–11, 13– 15, 17–20	103	Feldman, Jackson	1–11, 13–15, 17–20	
12, 16	103	Feldman, Jackson, Rush	12, 16	
Overall Outcome			1–20 ³	

Motion to Amend Outcome	Claim(s)
Original Claims Cancelled by Amendment	1–20
Substitute Claims Proposed in the Amendment	21–23, 25, 27–33, 35, 37–40 ⁴
Substitute Claims: Motion to Amend Granted	
Substitute Claims: Motion to Amend Denied	21–23, 25, 27–33, 35, 37–40
Substitute Claims: Not Reached	

³ The Board's determination that original claims were unpatentable was not challenged on appeal. Paper 41, 4.

⁴ Patent Owner withdrew substitute claims 24, 26, 34, and 36. MTA Sur-reply 2.

V. ORDER

It is
ORDERED that claims 1–20 of U.S. Patent 10,616,727 B2 are
unpatentable;

FURTHER ORDERED that Patent Owner’s contingent Motion to
Amend is denied; and

FURTHER ORDERED that, because this is a Final Written Decision,
parties to this proceeding seeking judicial review of the Decision must
comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2022-00568
Patent 10,616,727 B2

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