

**United States Court of Appeals  
for the Federal Circuit**

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**GOOGLE LLC,**  
*Appellant*

v.

**HAMMOND DEVELOPMENT INTERNATIONAL,  
INC.,**  
*Appellee*

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2021-2218

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Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2020-00081.

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Decided: December 8, 2022

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J. MICHAEL JAKES, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Washington, DC, argued for appellant. Also represented by ERIKA ARNER, SYDNEY KESTLE; KEVIN D. RODKEY, Atlanta, GA; DANIEL C. TUCKER, Reston, VA.

TIMOTHY EDWARD GROCHOCINSKI, Nelson Bumgardner Conroy PC, Orland Park, IL, argued for appellee. Also represented by CHARLES AUSTIN GINNINGS.

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Before MOORE, *Chief Judge*, CHEN and STOLL, *Circuit Judges*.

MOORE, *Chief Judge*.

Google LLC (Google) appeals from an *inter partes* review final written decision in which the Patent Trial and Appeal Board held that Google failed to prove claims 14–19 of U.S. Patent No. 10,270,816 would have been obvious. For the following reasons, we reverse in part and affirm in part.

## BACKGROUND

### A

Hammond Development International, Inc. (Hammond) owns the '816 patent, which discloses a communication system that allows a communication device to remotely execute one or more applications. '816 patent at 1:20–24. Claims 14 and 18 are representative:

14. A communication system, comprising:

a plurality of application servers;

a first communication link coupled to the plurality of application servers, the first communication link comprising a data connection;

*a first one of the plurality of application servers configured to execute a first application to establish a communication session with at least one communication device coupled to the first communication link in response to a request from the at least one communication device to establish the communication session;*

*a second one of the plurality of application servers coupled to a second communication link, the second one of the plurality of servers either (a) configured to receive a second*

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*application from at least one repository having a database maintaining the second application over the second communication link, or (b) configured to cause an execution of the second application via the second communication link;*

wherein the second communication link comprises a data connection;

wherein the second one of the plurality of application servers is configured to execute or cause the execution of the second application remote from the at least one communication device;

*wherein at least one of the plurality of application servers is configured to communicate a request for processing service to the at least one communication device; and*

wherein the request for processing service is communicated to the at least one communication device *over the first communication link.*

18. The communication system of claim 14, *wherein the request for processing service comprises an instruction to present a user of the at least one communication device voice data or audio data.*

Google petitioned for IPR of all claims of the '816 patent but did not assert the same grounds against all claims. Google alleged independent claim 1 would have been obvious in view of Gilmore, Dhara, and Dodrill. As relevant here, it argued Gilmore and Dodrill together taught claim 1's limitations reciting "the application server is configured to transmit . . . a request for processing service . . . to the at least one communication device" and "wherein the request for processing service comprises an instruction to present a user of the at least one communication device the voice representation," which the Board and parties refer to

as the first and second “request for processing service” limitations, respectively. Google alleged independent claim 14, which also recites the first request for processing service limitation, would have been obvious in view of Gilmore and Creamer. Google reintroduced Dodrill in its arguments concerning claims 18 and 19, which depend from claim 14 but also recite the second request for processing service limitation. Specifically, Google alleged claim 18 would have been obvious in view of Gilmore, Creamer, and Dodrill and claim 19 would have been obvious in view of Gilmore, Creamer, Dodrill, and Ladd.

On June 4, 2021, the Board held claims 1–13 and 20–30 would have been obvious over combinations including Gilmore and Dodrill. In particular, the Board found the combination of Gilmore and Dodrill teaches both request for processing service limitations. The Board determined that Google failed to show claim 14 would have been obvious in view of Gilmore and Creamer. The Board found that Gilmore and Creamer did not teach or suggest claim 14’s first request for processing service limitation. Having found a failure of proof as to independent claim 14, the Board held that Google also failed to show dependent claims 15–17 were unpatentable. For dependent claims 18 and 19, the Board interpreted Google’s petition as relying on Dodrill to teach only the second request for processing service limitation recited in claim 18, since Google had not relied on Dodrill to teach the first request for processing service limitation of claim 14. Because Gilmore and Creamer did not teach the first request for processing service limitation, the Board held that Google failed to show claims 18 and 19 were unpatentable.

## B

Google previously petitioned for IPR of Hammond’s U.S. Patent No. 9,264,483. The ’816 and ’483 patents are related and share the same specification. On April 12, 2021, the Board issued a final written decision determining all challenged claims of the ’483 patent would have been

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obvious based on prior art combinations that included Gilmore and Dodrill. Specifically, the Board found that Gilmore and Dodrill teach or suggest both request for processing service limitations, which are also in, amongst others, claim 18 of the '483 patent. Hammond did not appeal the Board's final written decision invalidating the challenged claims of the '483 patent, and it became final on June 14, 2021. 37 C.F.R. § 90.3.

Google appeals the Board's determination that claims 14–19 of the '816 patent are not unpatentable. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

Google argues the Board's determination that claim 18 of the '483 patent is unpatentable renders claim 18 of the '816 patent unpatentable based on collateral estoppel. We agree. The parties agree that the patentability of claim 14 of the '816 patent rises and falls with claim 18 of the '816 patent. Thus, we also hold claim 14 unpatentable. We do not agree, however, with Google's argument that dependent claims 15–17 and 19 would have been obvious based on the Board's findings as to parallel dependent claims.

#### I

We review the Board's conclusions of law de novo and its findings of fact for substantial evidence. *In re NuVasive, Inc.*, 841 F.3d 966, 971 (Fed. Cir. 2016). The ultimate question of collateral estoppel is a legal question, which we review de novo. *Ohio Willow Wood Co. v. Alps S., LLC*, 735 F.3d 1333, 1341 (Fed. Cir. 2013). Like many legal doctrines, however, collateral estoppel may implicate underlying facts, which we review for substantial evidence.

#### A

Before addressing the merits of the parties' arguments, we first consider whether Google forfeited its collateral estoppel argument. We conclude it did not. Although Google did not raise its present collateral estoppel argument in its

petition, that omission does not result in forfeiture in this case. The preclusive judgment on which Google now relies, the '483 patent final written decision, issued on April 12, 2021, and became final on June 14, 2021, both of which occurred well after Google filed its petition in the '816 IPR. Thus, Google could not have raised its collateral estoppel argument in its petition because the preclusive judgment did not yet exist. In such circumstances, Google did not forfeit its collateral estoppel argument by raising it for the first time on appeal. *Soverain Software LLC v. Victoria's Secret Direct Brand Mgmt., LLC*, 778 F.3d 1311, 1315 (Fed. Cir. 2015) (noting collateral estoppel “applies even though the precluding judgment . . . comes into existence while the case as to which preclusion is sought . . . is on appeal”).

## B

We now turn to whether the '483 decision has preclusive effect in this case. It is well established that collateral estoppel applies to IPR proceedings. *Papst Licensing GMBH & Co. KG v. Samsung Elecs. Am., Inc.*, 924 F.3d 1243, 1251 (Fed. Cir. 2019) (“[T]he issue preclusion doctrine can apply in this court to the Patent Trial and Appeal Board’s decision in an IPR once it becomes final.”). The party seeking to invoke collateral estoppel must show:

- (1) the issue is identical to one decided in the first action;
- (2) the issue was actually litigated in the first action;
- (3) resolution of the issue was essential to a final judgment in the first action; and
- (4) [the party against whom collateral estoppel is being asserted] had a full and fair opportunity to litigate the issue in the first action.

*In re Freeman*, 30 F.3d 1459, 1465 (Fed. Cir. 1994).

Here, the parties dispute only the first requirement: whether the issues are identical. It is well established that patent claims need not be identical for collateral estoppel to apply. *Soverain Software*, 778 F.3d at 1319. Rather,

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collateral estoppel requires that the *issues of patentability* be identical. *Ohio Willow Wood*, 735 F.3d at 1342. Thus, collateral estoppel may apply even if the patent claims “use slightly different language to describe substantially the same invention,” so long as “the differences between the unadjudicated patent claims and adjudicated patent claims do not materially alter the question of invalidity.” *Id.* Whether the differences between the patent claims materially alter the question of patentability is a legal conclusion based on underlying facts.

Google argues claim 18 of the ’816 patent and claim 18 of the ’483 patent present identical issues of patentability such that collateral estoppel applies. We agree. Both claims recite a communication system which allows a communication device to remotely execute one or more applications, wherein an application server communicates a request for processing service to the communication device and that request includes an instruction to present the user with voice or audio data. *Compare* ’816 patent at 14:47–15:10, 15:21–24, *with* ’483 patent at 14:3–33, 56–62. The only difference between the claims is the language describing the number of application servers. Claim 18 of the ’816 patent requires “a first one of the plurality of application servers configured to execute a first application” and “a second one of the plurality of application servers . . . either (a) configured to receive a second application . . . or (b) configured to cause an execution of the second application.” ’816 patent at 14:52–65. Claim 18 of the ’483 patent instead recites “one or more application servers” and requires “the at least one application server” is operable to perform the remaining functionality. ’483 patent at 14:6–10, 17–25.

For purposes of this appeal, this difference does not materially alter the question of patentability. The Board found the “plurality of servers” limitation of claim 18 of the ’816 patent would have been obvious, explaining that “distributing software applications across multiple servers was well known to the artisan” and crediting Google’s expert

testimony that an artisan “would have found it obvious to host each of Gilmore’s applications ‘on separate servers (each executing its own “application”).” J.A. 82–83; J.A. 2274–77 ¶¶ 242, 244, 247–251. Hammond does not challenge these factual findings on appeal. Accordingly, this difference is immaterial to our patentability analysis in the context of collateral estoppel. *See, e.g., Sovereign Software*, 778 F.3d at 1319–20 (holding that the unadjudicated claim’s additional limitation did not materially alter the question of patentability because it simply involved the “routine incorporation of [i]nternet technology into existing processes,” which would have been obvious). We conclude claim 18 of the ’816 patent and claim 18 of the ’483 patent are materially identical for purposes of collateral estoppel.

Since the issues of patentability of claim 18 of the ’483 patent and claim 18 of the ’816 patent are identical and the other elements of collateral are undisputed, collateral estoppel applies and we accordingly hold claim 18 of the ’816 patent unpatentable.<sup>1</sup> Further, the parties agree that if claim 18 is unpatentable, then independent claim 14 is as well. Oral Arg. at 30:25–30:47, 32:34–33:25, 37:00–37:08. Accordingly, by agreement of the parties, we hold claim 14 unpatentable.<sup>2</sup>

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<sup>1</sup> Because we hold collateral estoppel applies to claim 18, we do not reach Google’s remaining argument that the Board’s determinations with respect to claims 1 and 18 of the ’816 patent are inconsistent.

<sup>2</sup> While Google did not challenge claim 14 based on the same combination of prior art asserted against claim 18, Hammond does not argue that Google’s collateral estoppel arguments are limited to the references asserted in its petition. *See* Oral Arg. at 30:25–30:47, 32:34–33:25, 37:00–37:08. Thus, we do not consider the impact of the grounds raised in Google’s petition on the patentability of claim 14.



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### C

Google next argues that dependent claims 15–17 and 19 should fall because the Board found similar limitations in parallel dependent claims would have been obvious over the same prior art combinations. However, Google failed to raise any collateral estoppel arguments with respect to these claims and, unlike claim 14, there was no admission that, if claim 18 is unpatentable, claims 15–17 and 19 are unpatentable as well. *See* Oral Arg. at 33:26–33:47. The Board held that Google failed to show these dependent claims would have been obvious. Google, who bears the burden on appeal, has failed to convince us that the Board’s determinations should be reversed. Accordingly, we affirm the Board’s determinations that claims 15–17 and 19 are not unpatentable.

### CONCLUSION

Because collateral estoppel renders claim 18 unpatentable and the parties agree that the patentability of claim 14 rises and falls with claim 18, we reverse the Board’s determinations with respect to these claims. The Board’s determination that claims 15–17 and 19 are not unpatentable is affirmed.

**REVERSED IN PART AND AFFIRMED IN PART**

### COSTS

No costs.