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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/540,568	11/13/2014	Itay Sherman	547347USCON	8377
149118	7590	03/03/2020	EXAMINER	
Colby Nipper / Google 291 East Shore Drive Suite 200 Eagle, ID 83616			TSVEY, GENNADIY	
			ART UNIT	PAPER NUMBER
			2648	
			NOTIFICATION DATE	DELIVERY MODE
			03/03/2020	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ITAY SHERMAN

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Appeal 2018-005103  
Application 14/540,568  
Technology Center 2600

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Before LARRY J. HUME, CARL L. SILVERMAN, and  
MATTHEW J. McNEILL, *Administrative Patent Judges*.

HUME, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant,<sup>1</sup> Google Inc., appeals from the Examiner's decision rejecting claims 35–42, 44, 45 and 48–57, which are all claims pending in the application. Appellant has canceled claims 1–34, 43, 46, and 47. See Appeal Br. 32 *et seq.* We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Google Technology Holdings LLC. Appeal Br. 3.

## STATEMENT OF THE CASE<sup>2</sup>

The claims are directed to a wireless communicator for laptop computers. *See* Spec. (Title). In particular, Appellant’s disclosed embodiments and claimed invention relate to cellular communication. Spec. ¶ 2.

Claim 35, reproduced below, is representative of the subject matter on appeal (*emphasis* and brackets added to contested prior-art limitations):

### *Exemplary Claims*

35. A cellular communicator, comprising:

a baseband modem configured to:

connect the cellular communicator to the Internet through a cellular network and an Internet gateway; and

provide a computer with Internet access through a short range wireless communication between the baseband modem and a wireless modem of the computer;

a connector configured to physically connect the cellular communicator to the computer and provide the computer with Internet access through the connector;

[L1] *a bridge driver configured to enable both the short range wireless communication and the connector to provide the computer with Internet access during an ongoing Internet session by switching between the short range wireless communication and the connector, dependent on whether the*

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<sup>2</sup> Our decision relies upon Appellant’s Appeal Brief (“Appeal Br.,” filed Jan. 9, 2018); Reply Brief (“Reply Br.,” filed Apr. 18, 2018); Examiner’s Answer (“Ans.,” mailed Mar. 14, 2018); Non-Final Office Action (“Non-Final Act.,” mailed Aug. 28, 2017); and the original Specification (“Spec.,” filed Nov. 13, 2014) (claiming benefit of US 61/069,987, filed Mar. 19, 2008).

*cellular communicator is physically connected to the computer;  
and*

*[L2] a unified communication device bridge driver  
configured to automatically install on the computer and instruct  
the wireless modem of the computer to transfer to a low-power  
state when the cellular communicator is physically connected to  
the computer via the connector.*

*Prior Art*

The Examiner relies upon the following prior art as evidence in  
rejecting the claims on appeal:

Chang et al. (“Chang”)	US 2003/0078036 A1	Apr. 24, 2003
Lee et al. (“Lee ‘446”)	US 2006/0056446 A1	Mar. 16, 2006
Cheng	US 2007/0008582 A1	Jan. 11, 2007
Karstens et al. (“Karstens”)	US 7,242,963 B1	July 10, 2007
Fruhauf	US 2007/0175994 A1	Aug. 2, 2007
Lee (“Lee ‘201”)	US 2008/0031201 A1	Feb. 7, 2008
Wyld	US 2008/0070501 A1	Mar. 20, 2008

*Rejections on Appeal*

R1. Claims 49 and 50 stand rejected under 35 U.S.C. § 112(a) or 35 U.S.C. § 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. Non-Final Act. 9.

R2. Claims 35–42, 44, 45, 48, and 57 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Karstens, Lee ‘446, Fruhauf, and either Cheng or Chang. Non-Final Act. 10.

R3. Claims 49, 50, 53 and 54 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Karstens, Lee ‘446, Fruhauf, either Cheng or Chang, and Wyld. Non-Final Act. 18.

R4. Claims 51, 52, 55 and 56 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over the combination of Karstens, Lee ‘446, Fruhauf, either Cheng or Chang, and Lee ‘201. Non-Final Act. 19.

#### CLAIM GROUPING

Based on Appellant’s arguments (Appeal Br. 12–31) and our discretion under 37 C.F.R. § 41.37(c)(1)(iv), we decide the appeal of obviousness Rejection R2 of claims 35–42, 44, 45, 48, and 57 on the basis of representative claim 35; and we decide the appeal of written description Rejection R1 under pre-AIA 35 U.S.C. § 112, first paragraph, of claims 49 and 50 on the basis of claim 49.

Remaining claims 49–56 in obviousness Rejections R3 and R4, not persuasively argued separately, stand or fall with the respective independent claim from which they depend.<sup>3</sup>

#### ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellant. To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv).

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<sup>3</sup> “Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately.” 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellant does not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

We disagree with Appellant’s arguments with respect to claims 35–42, 44, 45, and 48–57 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner’s Answer in response to Appellant’s arguments. We highlight and address specific findings and arguments regarding claim 35 for emphasis as follows.

1. § 112, ¶ 1, Written Description Rejection R1 of Claims 49 and 50

Issue 1

Appellant argues (Appeal Br. 11–12; Reply Br. 2) the Examiner’s rejection of claim 49 under 35 U.S.C. § 112, first paragraph, as lacking written description support is in error. These contentions present us with the following issue:

Did the Examiner err in finding the negative limitation in claim 49 of “wherein the bridge driver is configured to receive . . . information for pairing the cellular communicator with the computer . . . *without necessitating a pairing request*” (emphasis added) lacks written description support in the originally-filed disclosure?

Analysis

The Examiner finds no support for the portion of the limitation identified, i.e., “without necessitating a pairing request” in the Specification. Non-Final Act. 9. “For example, the pairing request may have been sent through the wired connection (‘through the connector’) on the basis of which PIN code and timing data described in the applicant’s paragraph 0046 are transmitted through the wired connection. Or the pairing request may have

been sent through the wireless connection any time prior. The specification does not state that there is no such request.” *Id.* The Examiner construes this contested phrase as a negative limitation. Ans. 19 (citing Manual for Patent Examining Procedure (“MPEP”) § 2173.05(i)). We agree with the Examiner’s claim construction and factual findings, as discussed below.

In response, Appellant “asserts that support for the rejected claims may be found throughout the specification as filed and in at least [0008] and [0046].” Appeal Br. 11. We have reviewed these paragraphs relied upon by Appellant as allegedly providing support for the contested “without necessitating a pairing request,” and do not agree with Appellant’s contentions.

For example, instead of disclosing that there is *no* pairing request, Specification paragraph 8 discusses “automatic Bluetooth pairing,” and paragraph 46 discloses “provid[ing a] mobile cell phone with the necessary information for pairing with the laptop computer’s wireless transceiver[ and s]uch information may . . . [thereby] simplify[] the manual intervention required for pairing.” *Id.* (quoting Spec. ¶¶ 8 and 46).

We further find Appellant has not provided an explicit definition of “Bluetooth pairing” in the Specification that would exclude “automatic Bluetooth pairing” or simplified “manual intervention required for pairing” from the Examiner’s broader reading of the claim.<sup>4</sup>

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<sup>4</sup> During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the

The test for compliance with the written description requirement is “whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). “[T]he level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.”

We further note the disputed negative limitation was added during prosecution, and forms no part of the original disclosure. Regarding the amount of patentable weight to be given to the negative limitation at issue, we find Appellant’s proffered support in the Specification in paragraphs 8 and 46 does not identify any “descri[ption of] a reason to exclude the relevant limitation.” *Santarus, Inc. v. Par Pharmaceutical, Inc.*, 694 F.3d 1344, 1351 (Fed. Cir. 2012). (“Negative claim limitations are adequately supported when the specification describes a reason to exclude the relevant limitation. Such written description support need not rise to the level of disclaimer. In fact, it is possible for the patentee to support both the inclusion and exclusion of the same material.”).

Therefore, based upon the findings above, on this record, we are not persuaded of error in the Examiner’s finding that the disputed limitation

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words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

lacks adequate written description support, and we sustain the Examiner's written description Rejection R1 of claims 49 and 50.<sup>5</sup>

2. § 103 Rejection R2 of Claims 35–42, 44, 45, 48, and 57

Issue 2

Appellant argues (Appeal Br. 12–17; Reply Br. 2–4) the Examiner's rejection of claim 35 under 35 U.S.C. § 103(a) as being obvious over the combination of Karstens, Lee '446, Fruhauf, and either Cheng or Chang is in error. These contentions present us with the following issues:

(a) Did the Examiner err in finding the cited prior art combination teaches or suggests “[a] cellular communicator” that includes, *inter alia*, the limitations of:

[L1] a bridge driver configured to enable both the short range wireless communication and the connector to provide the computer with Internet access during an ongoing Internet session by switching between the short range wireless communication and the connector, dependent on whether the cellular communicator is physically connected to the computer  
...

[L2] a unified communication device bridge driver configured to automatically install on the computer and instruct the wireless modem of the computer to transfer to a low-power state when the cellular communicator is physically connected to the computer via the connector,

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<sup>5</sup> In the Reply Brief, Appellant asserts, “the Examiner did not respond to Appellant's remarks regarding the § 112 rejection of claim 50. It is therefore assumed that Appellant's remarks regarding claim 50 were determined to be persuasive by the Examiner, and thus, the Examiner agrees that the § 112 rejection of claim 50 is improper.” Reply Br. 2. We disagree with Appellant's argument because, on its face, dependent claim 50 inherits the deficiency of claim 49 with respect to lack of written description support.

as recited in claim 35?

(b) Did the Examiner err in combining the cited prior art because it would not have been obvious to combine these references in the manner suggested?

Analysis

With respect to Rejection R2, Appellant generally contends, “the Examiner has failed to establish a *prima facie* case of obviousness with respect to these claims.” Appeal Br. 12.

*(a) All Limitations are Taught or Suggested*

*Limitation L1: “bridge driver”*

Appellant contends:

While it is true that the device of Karstens may be configured as either a wired device *or* a wireless device, there is no mention, embodiment, or suggestion of a device in Karstens that incorporates *both* wired and wireless connections *in the same device*, much less *switching* between them based on whether the device is connected to the computer. Thus, while Karstens may be applied to a wireless or a wired connection, it simply cannot provide a basis for “enabl[ing] *both* the short range wireless communication and the connector . . . by *switching* between the short range wireless communication and the connector.”

Appeal Br. 13.

The Examiner first responds by stating “the appellant alleges that, according to the examiner, Karstens teaches the whole of limitation of claim 35 in the paragraph starting with the words ‘a bridge driver’. This is incorrect.” Ans. 20. “The examiner never stated that Karstens teaches that the switching is based on whether or not the cellular communicator is

physically connected to the computer, nor did the examiner state that the switching is performed during on ongoing Internet session. These features were disclosed by other cited references, but not Karstens.” *Id.*

The test for obviousness is what the combined teachings of the prior art would have suggested to the hypothetical person of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

We find Appellant’s arguments are not responsive to the rejection as articulated by the Examiner (*see* Non-Final Act. 12–13), and we agree with the Examiner’s analysis and findings, which determined the *combination* of Karstens and Lee teaches or suggests contested limitation L1. *See* Non-Final Act. 11–13. “Karstens does not teach that the connection is switched ‘during an ongoing Internet session’, ‘dependent on whether the cellular communicator is physically connected to the computer,’” but the Examiner instead finds that Lee teaches these limitations in the Abstract and in paragraphs 31, 56, 58, and 74. Non-Final Act. 12.

In the Reply Brief, Appellant continues the mistaken line of argument by ignoring the *combination* of references relied upon in the specific rejection articulated by the Examiner, i.e., by stating “Karstens simply cannot teach automatically (e.g., a computer-implemented method for) switching between a wired and wireless connection in a same device.” Reply Br. 2–3.

Therefore, we agree with the Examiner’s finding that the combination of Karstens and Lee teaches or suggests disputed limitation L1.

*Limitation L2: “device bridge driver configured to automatically install”*

Appellant contends:

There is simply no mention or suggestion in Fruhauf of changing an operation of the smart card reader at all, much less based on the smart card apparatus. Accordingly, Fruhauf does not correct the defect in Karstens, as it does not teach or suggest, “a driver configured to automatically install on the computer” from the cellular communicator “and instruct the wireless modem to transfer to a lower-power state when the cellular communicator is physically connected to the computer,” as recited in claim 35.

Appeal Br. 14.

In response, the Examiner states “appellant appears to imply that the examiner cited Fruhauf as teaching the whole of the last paragraph of claim 35 starting with the words ‘a unified communication device bridge’. This is incorrect.” Ans. 24. “In this portion, the examiner did not address the feature of automatic installation of the driver which is disclosed by another cited reference [either Chang or Cheng].” *Id.*

The Examiner further finds:

In analyzing the claimed feature [of two types of interfaces — wired and wireless], the examiner stated that it is well known in the art that if any components of a circuitry are not used in a certain operational mode, to switch off, disable or put in low power or sleep mode those components to save power, which is even more important in a battery powered devices, such as a laptop computer disclosed by Karstens (col. 5 lines 30–32) and PDA 100d. The fact that this feature is well known may be evidenced by paragraph 0042 of Fruhauf, which states that as soon as the communication between two devices (the devices being capable of communicating using wired and wireless types of connections) is performed through wired connection, the

circuitry responsible for wireless connection between the devices is placed in a standby mode . . . .

Ans. 25.

With respect to the portion of limitation L2 directed to automatic installation,

the examiner never relied on Fruhauf to disclose or suggest this specific feature. Instead, the examiner relied on either Cheng, who in paragraph 0005 teaches a peripheral device utilizing the USB connection port to install a driver stored on the peripheral device on the computer upon connection, or Chang[], who in paragraph 0003 teaches that if a new device with driver inside is connected with computer, the driver will be transmitted and installed automatically, without user operations, to support operation of the new device.

Ans. 27.

Again, we find Appellant’s arguments are not responsive to the rejection as articulated by the Examiner (*see* Non-Final Act. 13–16), and we agree with the Examiner’s analysis and factual findings, which determined the *combination* of Fruhauf with Cheng or Chang teaches or suggests contested limitation L2. *See* Non-Final Act. 14–15.

Therefore, we agree with the Examiner’s finding that the combination of Karstens with Fruhauf and either Cheng or Chang teaches or suggests disputed limitation L2.

*(b) The Examiner Provided Proper Motivation to Combine*

“Appellant respectfully submits that a *prima facie* case of obviousness cannot be established based on the combination of Karstens, [Lee ‘446], Fruhauf, and Cheng or Chang[] for at least the reason that it would not have been obvious to combine [these references].” Appeal Br. 14.

Appellant argues, “there is no suggestion by Karstens of enabling *both* the short range wireless communication and the connector to provide the computer with Internet access during an ongoing Internet session. Rather, Karstens is directed to a software bridge that communicatively links the PDA ‘to the host computer system 56 using *one* of a variety of different communication mechanisms.’” Appeal Br. 15. “[B]oth Karstens and Fruhauf are generally directed to use of a single wired or wireless connection and do not suggest any condition requiring *both* a wired network connection and a wireless connection.” *Id.*

The Examiner responds by observing, “[t]he appellant’s argument is built on the wrong interpretation of claim 35 that both interfaces, wireless and wired, must be active at the same time.” Ans. 28. The Examiner supports this observation by quoting Appellant’s argument, i.e., “‘Appellant . . . submits that there is no described enablement for how Karstens can use multiple communication mechanisms at the same time by incorporating Lee’s communication adapter.’” Ans. 29 (quoting Appeal Br. 16–17).

Our reviewing court held that the relevant inquiry is whether the Examiner has set forth “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007)).

We find the Examiner has provided sufficient articulated reasoning with rational underpinning to support the combination of the cited prior art references and the Examiner’s legal conclusion of obviousness. *See* Non-Final Act. 12–13 (providing reasoning concerning the combination of

Karstens with Lee); *id.* at 15 (providing reasoning concerning the combination of Karstens, Lee, Fruhauf, and Cheng or Chang).

Based upon the findings above, on this record, we are not persuaded of error in the Examiner's reliance on the cited prior art combination to teach or suggest the disputed limitations of claim 35, nor do we find error in the Examiner's resulting legal conclusion of obviousness. Therefore, we sustain the Examiner's obviousness rejection of independent claim 35, and grouped claims 36–42, 44, 45, 48, and 57, which fall therewith. *See Claim Grouping, supra.*

3. § 103 Rejections R3 and R4 of Claims 49–56

In view of the lack of any substantive or separate arguments directed to obviousness Rejections R3 and R4 of claims 49–56 under § 103 (*see* Appeal Br. 23–31), we sustain the Examiner's rejections of these claims. Arguments not made are waived.<sup>6</sup>

## REPLY BRIEF

To the extent Appellant *may* advance new arguments in the Reply Brief (Reply Br. 2–6) not in response to a shift in the Examiner's position in the Answer, arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's

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<sup>6</sup> With respect to dependent claim 49 in Rejection R3, Appellant merely argues limitations found in independent claim 35 from which claim 49 depends and, with respect to dependent claim 51 in Rejection R4, Appellant also argues limitations found in independent claim 35 from which claim 51 depends. Appeal Br. 23–31. We determine these arguments are not separate arguments for patentability, but instead reiterate the argument concerning the Examiner's rejection of independent claim 35.

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Answer will not be considered except for good cause (*see* 37 C.F.R. § 41.41(b)(2)), which Appellant has not shown.

#### CONCLUSIONS

(1) The Examiner did not err with respect to written description Rejection R1 of claims 49 and 50 under pre-AIA 35 U.S.C. § 112, first paragraph, and we sustain the rejection.

(2) The Examiner did not err with respect to obviousness Rejections R2–R4 of claims 35–42, 44, 45, and 48–57 under 35 U.S.C. § 103(a) over the cited prior art combinations of record, and we sustain the rejections.

DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis / References</b>	<b>Affirmed</b>	<b>Reversed</b>
49, 50	112, ¶ 1	Written Description	49, 50	
35–42, 44, 45, 48, 57	103(a)	Obviousness Karstens, Lee ‘446, Fruhauf, and either Cheng or Chang	35–42, 44, 45, 48, 57	
49, 50, 53, 54	103(a)	Karstens, Lee ‘446, Fruhauf, either Cheng or Chang, Wyld	49, 50, 53, 54	
51, 52, 55, 56	103(a)	Karstens, Lee ‘446, Fruhauf, either Cheng or Chang, Lee ‘201	51, 52, 55, 56	
<b>Overall Outcome</b>			35–42, 44, 45 48–57	

FINALITY AND RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED