

2019-1234

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

GOOGLE LLC,

Appellant,

– v. –

KONINKLIJKE PHILIPS N.V.,

Appellee.

*On Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in No. IPR2017-00386*

**APPELLEE’S COMBINED PETITION FOR REHEARING
AND REHEARING EN BANC**

Justin J. Oliver
VENABLE LLP
600 Massachusetts Ave., N.W.
Washington, D.C. 20001
Telephone: 202-721-5423
Facsimile: 202-344-8300
Email: JOliver@Venable.com

*Attorney for Appellee
Koninklijke Philips N.V.*

FEBRUARY 5, 2020

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

Google LLC, Koninklijke Philips N.V.,
Appellant v. *Appellee*

Case No. 19-1234

CERTIFICATE OF INTEREST

Counsel for the:

(petitioner) (appellant) (respondent) (appellee) (amicus)
 (name of the party)

Koninklijke Philips N.V.

certifies the following (use “None” if applicable; use extra sheets if necessary):

1. Full Name of Party Represented by me	2. Name of Real Party in interest (Please only include any real party in interest NOT identified in Question 3) represented by me is:	3. Parent corporations and publicly held companies that own 10 % or more of stock in the party
Koninklijke Philips N.V.	Koninklijke Philips N.V. (formerly Koninklijke Philips Electronics N.V.); U.S. Philips Corporation	[NONE]

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court (**and who have not or will not enter an appearance in this case**) are:

Fitzpatrick, Cella, Harper & Scinto (now Venable LLP)

5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal. See Fed. Cir. R. 47.4(a)(5) and 47.5(b). (The parties should attach continuation pages as necessary).

Koninklijke Philips N.V. v. Acer Inc., No. 18-cv-1885-HSG (N.D. Cal.),

Koninklijke Philips N.V. v. ASUSTeK Computer Inc., No. 18-cv-1886-HSG (N.D. Cal.),

Koninklijke Philips N.V. v. HTC Corp., No. 18-cv-1887-HSG (N.D. Cal.), and

Koninklijke Philips N.V. v. YiFang USA, Inc. d/b/a E-Fun, Inc., No. 18-cv-1890-HSG (N.D. Cal.),

all of which have been consolidated as

In Re Koninklijke Philips Patent Litigation, No. 18-cv-1885-HSG (N.D. Cal.).

February 5, 2020

/s/ Justin J. Oliver _____

Justin J. Oliver

Counsel for Appellee Koninklijke Philips N.V.

TABLE OF CONTENTS

	<i>Page</i>
TABLE OF CONTENTS.....	iii
TABLE OF AUTHORITIES	v
STATEMENT OF RELATED CASES	vi
RULE 35(B) STATEMENT OF COUNSEL	1
I. Points of Law and Fact Misapprehended by the Panel	2
A. The Decision’s Obvious-To-Try Analysis Misapprehends the Grounds Presented Below and Mistakenly Applies a Hypothetical User’s Preference Over the POSA’s Perspective.....	2
B. The Decision Fails to Account for the Board’s Finding of Fact that the Proposed Modification Contradicts Sakata II’s Explicit Teaching	4
II. Background of the Board’s Findings of Law and Fact Below	4
A. Google’s actual argument.....	4
B. Sakata II’s explicit teaching	5
C. Google’s obvious-to-try argument	6
III. Arguments.....	7
A. The Decision’s Obviousness-to-Try Analysis Ignores the Argument Made in the Petition and Substitutes a Hypothetical User’s Potential Preference Over the POSA’s Perspective	7
1. The Decision’s Theory Is Not Present in the Petition	7
2. The Decision’s Binary Choice Assumption is Misplaced	9

3.	The record does not establish that a problem existed	11
4.	A POSA would not predict any efficiency benefit	12
B.	The Court Ignores the Board’s Findings that Google’s Argument “Discount[ed]” Sakata II’s “Explicit Teaching”	16
C.	Rehearing En Banc	18
	CONCLUSION	19

TABLE OF AUTHORITIES

	<i>Page(s)</i>
Cases	
<i>Arctic Cat Inc. v. Bombardier Recreational Prods., Inc.</i> , 876 F.3d 1350 (Fed. Cir. 2017)	1, 18, 19
<i>KSR Int. Co. v. Teleflex Inc. et al.</i> , 550 U.S. 398 (2006).....	12, 17
<i>Polaris Indus., Inc. v. Arctic Cat, Inc.</i> , 882 F.3d 1056 (Fed. Cir. 2018)	1, 18, 19
<i>In re Ratti</i> , 270 F.2d 810 (CCPA 1959).....	18
<i>SAS Inst. Inc. v. Iancu</i> , 138 S. Ct. 1348 (2018).....	1, 3, 10, 15, 19
<i>W.L. Gore & Assoc., Inc. v. Garlock, Inc.</i> , 721 F.2d 1540 (Fed. Cir. 1983)	11, 13

STATEMENT OF RELATED CASES

This is an appeal by Google LLC (“Google”) from an inter partes review (“IPR”), No. IPR2017-00386, of U.S. Patent No. RE44,913 (“the RE’913 patent”) before the Patent Trial and Appeal Board (“Board”). Koninklijke Philips N.V. (“Philips”), the appellee here, owns the RE’913 patent. No prior appeal from this IPR was previously before this Court or any other court.

Philips has asserted the RE’913 patent in the following cases: (1) *Koninklijke Philips N.V. v. Acer Inc.*, No. 18-cv-1885-HSG (N.D. Cal.); (2) *Koninklijke Philips N.V. v. ASUSTeK Computer Inc.*, No. 18-cv-1886-HSG (N.D. Cal.); (3) *Koninklijke Philips N.V. v. HTC Corp.*, No. 18-cv-1887-HSG (N.D. Cal.), and (4) *Koninklijke Philips N.V. v. YiFang USA, Inc. d/b/a E-Fun, Inc.*, No. 18-cv-1890-HSG (N.D. Cal.), all of which have been consolidated as *In Re Koninklijke Philips Patent Litigation*, No. 18-cv-1885-HSG (N.D. Cal.).

RULE 35(B) STATEMENT OF COUNSEL

1. Based on my professional judgment, I believe the panel decision is contrary to the following precedent of this Court and the Supreme Court:
 - a. *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056 (Fed. Cir. 2018);
 - b. *Arctic Cat Inc. v. Bombardier Recreational Prods., Inc.*, 876 F.3d 1350 (Fed. Cir. 2017); and
 - c. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348 (2018).

2. Based on my professional judgment, I believe this appeal requires an answer to one or more precedent-setting questions of exceptional importance:
 - a. Can a “general” obvious-to-try theory predicated on the idea that a user “might” benefit from a reference’s modification (which is not the theory argued below) be adopted on appeal without deference to the Board’s finding that the primary reference dissuades the proposed modification, such that a “general” obvious-to-try assertion trumps all other non-obvious considerations?

/s/ Justin J. Oliver

Attorney of Record for Appellee Koninklijke Philips N.V.

I. Points of Law and Fact Misapprehended by the Panel

A. The Decision’s Obvious-To-Try Analysis Misapprehends the Grounds Presented Below and Mistakenly Applies a Hypothetical User’s Preference Over the POSA’s Perspective

The obvious-to-try analysis in this Court’s Decision dated January 6, 2020 (“Decision”) misapprehends the actual ground presented by Google below (and the Board’s ruling on the same) and analyzes obviousness from the perspective of hypothetical users rather than the POSA.

Google’s ground in its Petition proposed omitting a step from Sakata II, theorizing that the omission would lead to a default. While Google included two lines of boiler plate language on the “obvious-to-try” analysis, even that statement related to the idea of omitting a critical step in Sakata II. Google never addressed the idea of substituting other options for Sakata II’s step, or what the possible options would be. The Decision treated Google’s boilerplate language as a fully formed obvious-to-try argument, despite no specifics other than the idea of omitting a step from Sakata II. A ground arguing *substituting* other options for Sakata II’s step was never raised in Google’s Petition.

Thus, the panel used the mere mention of “obvious to try” to rule on a later-constructed ground, rather than judging the merits of the ground Google actually raised below. This contradicts Supreme Court precedent limiting the scope of

review to the arguments raised in the Petition. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018).

Finally, the obvious-to-try analysis overlooks legal requirements of a known problem in the field and a predictable solution. Sakata II *achieved efficiency* through the substitution feature of menu 23, which adapts to user selections. Nothing suggests that a POSA would have recognized any problem with Sakata II's solution, or that a POSA would predict that eliminating Sakata II's solution with a return-to-default option would increase efficiency. Indeed, the Board found Google's arguments on this point deficient.

As to predictability, a POSA considering a chemist, a wire maker and a writer would appreciate that all have different needs and would be hard pressed to select a single default key for the group, instead recognizing the merits of Sakata II's adaptation to different users. Rather than consider a POSA's view, the Decision's "efficiency-will-vary" theory improperly uses the perspective of a hypothetical user. That theory contradicts Google's own arguments below, which focused on the POSA's view of efficiency of the interface as a whole, across users. The POSA is an interface designer who would not measure *overall* interface efficiency based on one hypothetical user. Catering to the preference of a hypothetical user (or group) would harm efficiency for most others.

B. The Decision Fails to Account for the Board’s Finding of Fact that the Proposed Modification Contradicts Sakata II’s Explicit Teaching

The Decision’s analysis also ignores a primary finding of fact below: that Google’s arguments and evidence were “insufficient to overcome Sakata II’s explicit teaching that its substitution improves efficiency.” Appx0025. The Board took seriously that Sakata II contradicted Google’s proposal. The Decision ignores that the Board found a lack of motivation to contradict Sakata II’s explicit teaching. In doing so, the Decision elevates a “general” obvious-to-try argument, made with no specifics, over the opposing teaching in the prior art. That action treats the mention of “obvious to try” as a trump card that the judiciary may use to ignore a lack of specific grounds in the Petition, finding of fact concerning a reference’s teaching, the state of the art, a POSA’s motivation, and the burden of proof. That view makes the obvious-to-try analysis a matter purely within a judge’s discretion, without deference to contrary teachings or findings. That is not the role of this Court in reviewing whether a petitioner met its burden.

II. Background of the Board’s Findings of Law and Fact Below

A. Google’s actual argument

The record defines the POSA as having a “degree in computer science or computer engineering” and “experience in *designing* . . . user interfaces.” Appx0015 (quoting Appx0072) (emphasis added). The correct analysis considers

how a computer scientist at the time would have viewed interface design in general and Sakata II's admonitions.

Google's argument required a POSA to have believed that the modification to Sakata II—omitting the step of adapting to a user's last selection from menu 23—would have predictably led to an “increase [in] efficiency” across users. Appx0024, (citing Appx0090-0092), Appx0205-0206 (¶145)). Google's Petition asserted that “[i]t is *well known* in the art that, *from a statistical standpoint*, certain characters are used far more often than others.” Appx0091 (emphasis in original), Appx22. Google did not mention hypothetical users or the idea that a POSA would design to unique user preferences. The Board found that evidence did not support the idea that a POSA could predict that one character's usage supremacy over all others, across users, so as to achieve increased efficiency. Appx0023-0025.

B. Sakata II's explicit teaching

Google's argument proposed *omitting* the very step Sakata II praised, which is distinct from the idea of *substituting* one of a number of finite alternatives. The Board acknowledged Philips's argument that Sakata II discouraged that omission because doing so removed the feature that Sakata II lauded as the key to efficiency. Appx0018 (citing Appx2479-2480).

The Board acknowledged that Sakata II described the “heavy burden” in having to search for special characters, and that the adaptive operation avoided

such problems. Appx0019, Appx0025; Appx0308 (¶[0008]) (“imposes a heavy burden on a user”), Appx0311 (¶[0050]) (“hassle of searching”), Appx0311 (¶[0056]).

“It is against this backdrop that [the Board] evaluate[d] Petitioner’s argument that [a POSA] would have found it obvious to [omit] ... Sakata II[‘s] ... character substitution.” Appx0020 (citing hindsight case law). The Board concluded that “Dr. Cockburn’s testimony is insufficient to overcome Sakata II’s explicit teaching that its substitution improves efficiency.” Appx0025.

C. Google’s obvious-to-try argument

Concerning the obvious-to-try argument, the Board found that Google failed to “adduce sufficient evidence in support of” the idea that a POSA would have made the modification at all, let alone with a predictable expectation of improving efficiency. Appx0022. The Board found that no credible evidence supported that “from a statistical standpoint, certain characters are used far more often than others.” Appx0022 (emphasis omitted), Appx0091. Notably, Google never made any argument about the idea of substituting other options. Its mention of “obvious to try” only added boiler plate language to the idea of omitting Sakata II’s key step. Consequently, the Board and Philips focused on the omission assertion, with Google having not fleshed out any true obvious-to try analysis.

The Board properly framed the issue as being consideration of whether a POSA would have been able to predict that one character of menu 23's seven options would be used more often than others, as a general matter. The Board recognized that the correct analysis addressed a POSA's view of interface design relative to efficiency "across all users." Appx0028; Appx0092 ("users are always familiar"), Appx2573 ("intended users"), Appx0114-0115 ("average computer user").

Philips established that Sakata II's operation already accounted for the differences among users by adapting to user selections. Appx2589 (¶129).

III. Arguments

A. The Decision's Obviousness-to-Try Analysis Ignores the Argument Made in the Petition and Substitutes a Hypothetical User's Potential Preference Over the POSA's Perspective

1. The Decision's Theory Is Not Present in the Petition

The Decision's obvious-to-try analysis employs a hindsight-based theory to set aside the Board's well-reasoned analysis of the arguments and evidence presented below, which explicitly acknowledged the scope of Google's arguments.

First, the Decision misapprehends that Google's proposal was firmly rooted in the idea of omitting a key step of Sakata II. The proper response to such an argument is to determine whether a POSA would make such an omission. Philips

established the reasons why the POSA would not do so, and the Board agreed. *See* Sec. III.B., below.

Other than an off-hand assertion of “obvious to try,” Google never developed an argument that suggested what other options could be *substituted* for Sakata II’s stated step. Because of the posture of Google’s actual argument—an omission—Philips focused on the most proper response to the same. Namely, Philips established why a POSA would not have contradicted Sakata II’s explicit teaching in omitting the key step that formed the very path to achieving Sakata II’s objective. The Decision criticizes Philips for “shift[ing] the inquiry away from the question of what options are available at the last step” (Slip Op. 8) and not identifying “the real-world substantiality of any other options at this step” (Slip Op. 10). However, Philips had no need to rebut the idea of possible substitution to Sakata II’s operation, because a substitution argument was never raised. Nor did Google identify what it believed to be the finite number of substitutions, let alone the predictability of any such options. Had such an argument been made, Philips would have rebutted the same. Philips and the Board focused on the omission ground actually presented in the Petition.

Given the posture of Google’s argument, Philips had no reason to ignore Google’s specific omission argument, in favor of disproving an undeveloped boilerplate assertion. Indeed, responding to an argument that omitting a step

would have been obvious with an assertion that there are numerous alternatives would have been misplaced, as the same would not disprove the obviousness of the omission. Philips responded to the only basis for the ground specified by in the Petition.

Further, as discussed in more detail below, the evidence did establish that this was a binary choice.

2. The Decision's Binary Choice Assumption is Misplaced

The Decision asserts that Sakata II implicitly teaches two, and only two, options—a default and adapting to user selection. Slip Op. 9. This assertion does not properly consider Google's argument below, which admitted that Sakata II did not teach the default option. Appx0088-0089, Appx0103. That acknowledgement set the framework for review. Precedent requires that a petitioner's arguments dictate the contours of the proceeding, not judicial notice or new reply arguments. *SAS*, 138 S. Ct. at 1355; *see* Slip Op. 10, n.2. Philips operated within this framework.

Further, Philips did assert below and on appeal that other options included “predictive” keyboards. Red Br. at 2. Predictive keypads changed in layout after selection of one option because the system predicted a likely next need of the user (as opposed to a default or user selection). *Id.* This prediction can be achieved in numerous ways, each way being an alternative option. Moreover, the Decision's

reasoning acknowledges other design options, including the Shift key, but mistakenly interprets the same to support a return to a default. Slip Op. 8-9. A Shift key function never changes a keyboard's layout of *displayed* characters. In fact, for specialized keys¹, a Shift key depicts both options simultaneously on a physical keyboard so that a user knows what the Shift option offers (*e.g.*, “:” vs. “;” or “%” vs. “5”). That concept does not mesh with Sakata II's menu 23, which displays previously unseen characters (*i.e.*, changing the visible characters for selection and then changing the original keypad layout after selection). A Shift function would avoid the need for Sakata II's menu 23, inasmuch as the function enables access to different characters without any secondary display.

Consequently, the Decision's mention of the Shift function confirms that a POSA's considerations would not have been limited to only a binary change to menu 23's operation, but an overall consideration of access to special characters. Moreover, the legal consideration should not be reduced to a POSA's decision-making process on one limited aspect of a reference, as the reference must be viewed in its entirety. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983).

Finally, the Decision's view fails to appreciate the field at the time, in which designers were springboarding from physical keyboard designs (with static

¹ For standard letters, Sakata II has no alternative options. Red Br. at 5.

layouts) into virtual touchscreens. Consequently, references like Sakata II were not modifications to existing ideas but the “starting point” for the new field. Appx3385-3386. The Board relied on that understanding of the field, with no evidence suggesting otherwise, distinguishing this case from *Perfect Web*. Slip Op. 8.

Thus, the Decision’s assumptions concerning what Sakata II implicitly teaches does not reflect the record below or the admissions in the original Petition.

3. The record does not establish that a problem existed

The obvious-to-try framework requires a “known problem” with Sakata II’s operation and that a POSA would have appreciated a “predictable” or “obvious” solution. *KSR Int. Co. v. Teleflex Inc. et al.*, 550 U.S. 398, 401 and 421 (2006). Even if one were to assume a binary choice in Sakata II, neither of those legal requirements exist here.

Google alleged below that the reason for modifying menu 23 was *improved efficiency* over Sakata II’s design. Appx0017-0018. But Sakata II *achieved efficiency* through adaptive substitution, the very feature Google proposed to remove. Appx0019-0020. Absent any evidence of a recognized problem with Sakata II’s efficiency solution, the very starting point for an obvious-to-try analysis fails. This issue is particularly important here, where the nascent field provided no basis to question Sakata II’s teaching. Appx3385-3386.

4. A POSA would not predict any efficiency benefit

The proposed modification relied on an allegation of approving efficiency based on the idea of picking an overall statistical winner. Appx0022. The Petition alleged a statistical certainty across contexts (although the Reply shifted to a general truism). Appx0022-0023. The Board found Google's evidence deficient on this point. Appx0018. Critically, both Google's argument and the Board's ruling considered what a POSA could have predicted for characters in general, rather than specific users. That is the framework the Decision should have considered, but did not.

The Decision brushed aside the failure of the actual statistical argument and instead adopted "a general efficiency-will-vary" theory. Slip. Op. 11. That theory suffers from logical and legal errors.

First, the theory fails to consider the POSA's knowledge or viewpoint. The Decision offers that "[a] chemist might often prefer" the "mg" character, whereas a wire maker . . . might prefer" the "mm" character. Slip Op. 10. Those assumptions substitute conjecture for evidence of a POSA's knowledge. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983) ("It is difficult but necessary that the decisionmaker . . . occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted wisdom in the art.")

Google's evidence did not suggest that a POSA would appreciate the preferences of particular users. Google's argument below rested upon a POSA being able to identify a statistical winner across all users. Appx0022-0023, Appx0091. The Decision presents a wholly different argument, in which the focus is on "different answers for different users." Slip Op. 10. Google's argument relied on an all-user argument because Sakata II already adapted to individual user preferences, and Google needed to scrap user adaptation for an across-the-board solution: the statistically perfect default.² The Decision, however, looked at what one "might *often* prefer," which theory does not appear in the Petition and acknowledges the lack of true predictability. Slip Op. 10. It also presents an unrealistic (and not argued) idea that a POSA would design an interface with a particular user in mind, to the known detriment of most other users.

Google's argument required abandoning an attempt to adjust to users' needs for a one-size-fits-all approach. The Board properly found that no evidence supported that such an attempt could achieve efficiency over Sakata II's design. Given Google's proposal for a global default solution, the Petition did not address unique user preferences or hypotheticals concerning chemists and wire makers.

² There is no suggestion in the record of a default being adjustable or otherwise dictated by each user. The only suggestion below of user-specific settings is Sakata II's adaptive design.

And Philips' expert explained that differences among users would cause a POSA *to follow Sakata II's adaptive method*. Appx0018, Appx2589 (¶70).

Consequently, the Decision improperly creates a new theory, which misapprehends the argument below and fails to consider what a POSA could predict. Creating this theory violates SAS's admonitions against considering arguments not presented in the Petition. SAS, 138 S. Ct. at 1355.

As to the substance of the new theory, a POSA would have needed to know that the change would have *predictably solved* the problem, *i.e.*, improved Sakata II's efficiency. The Decision fails to address why a POSA would have believed that abandoning the adaptive solution of Sakata II would have been predicted to improve *the interface in general*. The underlying problem throughout the Decision's analysis is the focus on the needs of a unique, hypothetical user. Slip Op. 10-11. That premise analyzes obviousness from the perspective of one user, rather than that of a POSA. The POSA's efficiency view would span all users. Appx0028 ("across all users"), Appx0114-0115 ("average computer user"), Appx2567 (¶92) ("average user"), Appx0041 (2:11-14) ("average user").

The Decision's hypotheticals reduce the analysis to what could work in one atypical situation. Slip Op. 10. No evidence suggests that a POSA would be so myopic. A POSA would have no reason to select one of the seven options from menu 23 as a default in the hope that the same "might" be more efficient for one

small group. *Id.* Efficiency considerations would encompass the overall problem and the broadest swath of users. The Board addressed that issue and found that no evidence supported such predictability. Appx0025. That was the correct analysis.

Even if a POSA could predict that a chemist would use the “mg” character on a small portable device more often than the other six characters (and no evidence supports the same), a default relates to a setting applied to the system in general. A POSA could not predict that setting a default to a hypothetical chemist’s needs would improve efficiency where doing so would harm efficiency for the wire maker and writers. From the POSA’s perspective, choosing one special character out of seven would reduce efficiency for most users, thus failing to provide a predictable solution and instead discouraging the modification. *See KSR*, 550 U.S. at 402.

Further, while the Decision asserts that there was no finding that success would be in doubt (Slip Op. 11), that premise assumes that it was Philips’ duty to prove a negative, *i.e.*, to disprove a “general” hunch that it would not be successful for at least one user. But the burden of persuasion rested with Google, “never shift[ing] to Patent Owner” (Appx0007), and the Board ruled on Google’s specific arguments on this point, which did not argue the hypothetical, individual user. Appx0023-0025.

Thus, the Decision’s new theory lacks support in the record and would not predictably improve overall efficiency.

B. The Court Ignores the Board’s Findings that Google’s Argument “Discount[ed]” Sakata II’s “Explicit Teaching”

The Decision predicates its ruling on the obvious-to-try analysis, while ignoring a critical Board finding. Specifically, the Board considered that the proposed modification went against the explicit teaching of Sakata II. Appx0025 (“Dr. Cockburn’s testimony is insufficient to overcome Sakata II’s explicit teaching that its substitution improves efficiency”).

Google’s arguments “discount[ed] [Sakata II’s] explicit teaching that this substitution improves efficiency.” Appx0023. Moreover, Google’s basis for going against Sakata II’s teaching rested upon an alleged improvement in efficiency—suggesting that removing Sakata II’s *solution* for efficiency would somehow increase efficiency. The Decision does not consider the Board’s finding of fact that Sakata II discouraged modification to its adaptive feature. *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1069 (Fed. Cir. 2018) (explaining the importance of considering a reference’s teachings that “led in a direction divergent from the [applicant’s] path”). No evidence suggests that a POSA would have ignored Sakata II’s teaching. Appx3368 (“the character substitution step is specifically praised by Sakata”).

The Decision improperly addresses the obvious-to-try analysis in a vacuum, ignoring the finding that the modification contradicts Sakata II's very purpose. *Arctic Cat Inc. v. Bombardier Recreational Prods., Inc.*, 876 F.3d 1350, 1360 (Fed. Cir. 2017) ("Evidence suggesting reasons to combine cannot be viewed in a vacuum apart from evidence suggesting reasons not to combine"); *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959) (discouraging any "change in the basic principles under which [the reference's] construction was designed to operate").

Further, under the logic of the Decision, doing the exact opposite of a reference's teaching could be one of a finite number of predictable solutions, based on mere judicial notice, regardless of evidence presented. But if a direction states that turning left provides the quickest route to a destination, it is counterintuitive to propose that it would be obvious to go right to improve quickness. The Decision adopts that counterintuitive logic as a legal certainty in the obvious-to-try framework. Doing so discounts the findings of fact on the state of the art and what Sakata II reasonably suggested. And the premise would allow petitioners to simply assert as "generally" obvious-to-try any modifications contrary to prior art's teachings, with nothing more than unsupported hypotheticals in support. But that ignores the burden placed on a petitioner and the need for deference to findings of fact below.

C. Rehearing En Banc

For the reasons stated above, the Decision improperly reimagines the grounds actually at issue below, creating new obviousness theories in violation of *SAS*. *SAS*, 138 S. Ct. at 1355. Further, the Decision does not give weight to the Board’s finding of fact that Sakata II “led in a direction divergent from” the claimed invention. *Polaris*, 882 F.3d at 1069. Instead, the Decision improperly addresses the obvious-to-try analysis in a vacuum, ignoring contrary indicators. *Arctic Cat*, 876 F.3d at 1360 (Fed. Cir. 2017).

Finally, this case presents an issue of exceptional legal importance. As discussed above, the Decision creates a “general” obvious-to-try theory that trumps all consideration of the record below, including the Board’s finding that the primary reference dissuades the proposed modification and that Google presented a different. This Court should address whether such a “general” obvious-to-try assertion trumps all other non-obvious considerations, as the Decision suggests, so as to allow this Court to consider any obvious-to-try issue as purely a matter of law even when a petition asserts the obvious-to-try issue without specificity.

CONCLUSION

For these reasons, the Court should grant rehearing.

Respectfully submitted,

/s/ Justin J. Oliver

Justin J. Oliver

VENABLE LLP

600 Massachusetts Ave., NW

Washington, DC 20001

Telephone: 202-721-5423

Facsimile: 202-344-8300

Email: JOliver@Venable.com

*Attorneys for Appellee Koninklijke
Philips N.V.*

ADDENDUM

NOTE: This disposition is nonprecedential.

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

GOOGLE LLC,
Appellant

v.

KONINKLIJKE PHILIPS N.V.,
Appellee

2019-1234

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2017-00386, IPR2017-01766.

Decided: January 6, 2020

ANDREW V. TRASK, Williams & Connolly LLP, Washington, DC, argued for appellant. Also represented by AARON P. MAURER, KEVIN HARDY, DAVID M. KRINSKY.

JUSTIN J. OLIVER, Venable LLP, Washington, DC, argued for appellee.

Before LOURIE, BRYSON, and TARANTO, *Circuit Judges*.

TARANTO, *Circuit Judge*.

Koninklijke Philips N.V. owns U.S. Patent No. RE44,913, which concerns device keypads that provide both primary and secondary characters associated with particular keys. After Philips sued Acer Inc. and other companies, alleging infringement based on devices that use Google operating systems, Google Inc. petitioned the Patent and Trademark Office, naming Acer and others as real parties in interest, to institute an inter partes review of claims 1 and 3–16 of the '913 patent for obviousness under 35 U.S.C. § 103. The PTO's Patent Trial and Appeal Board, acting on behalf of the PTO's Director, *see* 37 C.F.R. §§ 42.4, 42.108, instituted the requested review. In September 2018, the Board issued a final written decision concluding that Google had failed to prove obviousness. *Acer Inc. v. Koninklijke Philips Electronics N.V.*, No. IPR2017-00386, 2018 WL 4657646 (P.T.A.B. Sept. 26, 2018).

Google appeals. Philips's claimed invention differs in at most one way from the specific method (and related device) described in the principal prior-art reference featured in Google's petition. With that prior-art method, primary and secondary characters are associated with a given key; the secondary characters are presented to a user when the key is held for an extended time; and after the user chooses a secondary character for entry, that character is substituted for the primary character on the key. The last step is the only difference from Philips's claimed invention, in which the default primary character is retained on the key after secondary-character selection. That return-to-default option is what the prior-art reference itself compares its own character-substitution option to when touting its solution as enhancing efficiency. We conclude, on the record of this case, that the Philips invention would have been obvious in light of the prior art. We therefore reverse the Board's decision.

I

The '913 patent, titled “Text Entry Method and Device Therefor,” is a reissue of U.S. Patent No. 6,885,318. The patent describes a method for entering primary and secondary characters on the keypad of a device such as a handheld mobile device. '913 patent, col. 2, lines 20–37. According to the patent, traditional mobile device keypads used one of two methods for entering characters: multitap or predictive text. In the multitap method, each key on the mobile device keypad is associated with multiple characters. To select a character, the user repeatedly presses a key to cycle through the key’s associated characters until the desired character is located. *Id.*, col. 1, lines 46–48. The multitap method, the '913 patent explains, is “slow and prone to error” because the method “often requires more than two key taps to select a character.” *Id.*, col. 1, lines 63–67. In the predictive-text method, predictive-text software alters the layout of a dynamic, touch-sensitive display by determining the “next most likely character required by the user.” *Id.*, col. 2, lines 6–11. But predictive-text keypads present “an unfamiliar interface to the average user” and require “much practice and learning for proficient and quick text entry.” *Id.*, col. 2, lines 11–17.

The '913 patent seeks to improve these methods by providing a keypad that is familiar to users and also allows for improved character entry. '913 patent, col. 2, lines 20–24. Each key on the keypad is associated with a primary character and a number of secondary characters. *Id.*, col. 3, lines 27–28. In its default state, each key displays its primary character. *Id.*, col. 2, lines 30–32. To select a primary character, the user performs a “quick tap[]” on the key. *Id.*, col. 6, lines 3–6. To select a secondary character, the user selects the key associated with the desired secondary character for “a period longer than [a] predetermined time period.” *Id.*, col. 6, line 61 through col. 7, line 3. This action causes the device to display a menu of secondary characters. The user then taps the desired secondary

character to select it. *Id.*, col. 2, lines 35–37. After the secondary character is selected, “the keypad . . . is returned to the default display state,” *i.e.*, each key displays its primary character. *Id.*, col. 3, lines 60–62; *id.*, col. 2, line 37.

The patent includes three independent claims that are at issue in this appeal: claims 1, 3, and 4. Claim 1, which is illustrative, recites:

1. A method for inputting a character to a device, the device including a keypad, the keypad including a plurality of keys, at least one of the keys has a primary character, a plurality of secondary characters and an associated display area, the keypad in a default state displaying the primary character associated with the at least one key in the associated display area, the method comprising acts of:

in the default state,

returning the primary character as an input character in response to selection of the at least one key for a period shorter than a predetermined time period;

switching to a second state after detecting a first key selection of the at least one key for a period longer than the predetermined time period;

in the second state

displaying each of the secondary characters associated with the first selected key in a respective display area;

detecting a second key selection;

selecting for the input character the secondary character associated with the second key selection; and

returning the keypad to the default state.

Id., col. 6, line 48 through col. 7, line 3 (bracketed material omitted) (emphasis added). Claims 3 and 4 are similar to claim 1, except that claim 3 claims a computer program product that executes the method of claim 1, and claim 4 claims the device described in claim 1. *Id.*, col. 7, line 11 through col. 8, line 5.

In the inter partes review at issue here, Google challenged claims 1 and 3–16 of the '913 patent as unpatentable for obviousness, stating two (related) grounds: obviousness over an English translation of Japanese Patent Application No. 2000–148366 to Sakata (Sakata II); and obviousness over Sakata II in view of U.S. Patent No. 6,094,197 to Buxton (Buxton). The Board determined that Google failed to prove unpatentability on either ground. *Acer*, 2018 WL 4657646, at *1, *12.

Google timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

Google asserts that claim 1 is representative and seeks reversal as to all challenged claims based on arguments focused on claim 1. Philips does not dispute the representativeness of claim 1, and it makes no argument against reversal as to all challenged claims if reversal is warranted as to claim 1, as we conclude it is. Accordingly, we may and do limit our discussion to claim 1.

II

Obviousness is a question of law, to be determined by the court based on underlying findings of fact. *See KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015); *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1327 (Fed. Cir. 2009). We review the Board's ultimate conclusion of obviousness de novo and any underlying factual findings for substantial evidence. *In re Varma*, 816 F.3d 1352, 1359 (Fed. Cir. 2016). "Substantial evidence review asks whether a reasonable fact finder could have arrived at

the agency’s decision and requires examination of the record as a whole, taking into account evidence that both justifies and detracts from an agency’s decision.” *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1366 (Fed. Cir. 2016) (internal quotations omitted).

It is undisputed that a relevant artisan, as of the effective date of the ’913 patent, would have known the teachings of Sakata II. Sakata II discloses a method for inputting text using a keyboard displayed on a touch screen. To select a character displayed on the keyboard, the user touches and quickly releases the associated key on the display screen. But when the user touches a key on a specific portion of the keyboard for longer than a preset “threshold time,” a drag menu appears above the key, displaying a series of related characters. J.A. 311, ¶ 55. The user then drags over to the desired character on the drag menu and releases to select that character for entry. As a last step, after the selected character is input, that character replaces the character previously displayed on the key. J.A. 310, ¶ 41.¹

In its petition to the Board, Google argued that a person of ordinary skill in the art would have found the ’913 patent claim obvious in light of the Sakata II method having character substitution as the last step, with or without Buxton. The parties do not dispute that the ’913 patent claim differs from that Sakata II method in only one respect. In the ’913 patent claim, after a secondary character is selected, the relevant key “return[s] . . . to the default

¹ Sakata II includes method (claim 9) and device (claim 4) versions of its claimed improvement in keypads. J.A. 307. Sakata II also refers to “symbols” as well as “characters” made available for selection. *Id.* For simplicity, we describe Sakata II as involving a method and characters.

state” rather than, as in the described Sakata II method, changing to the selected secondary character.

In *KSR*, the Supreme Court set forth various articulations of “a properly flexible obviousness inquiry” that is “not subject to a rigid formula.” *Perfect Web*, 587 F.3d at 1327, 1329 (internal quotation omitted). The Court’s related formulations reflect the need for grounding such determinations in facts indicating why the claimed invention would have been obvious, while recognizing real-world pressures for innovation and both the “background knowledge” and “ordinary creativity” of a relevant artisan. *KSR*, 550 U.S. at 416–21. In one formulation that is key to this case, the Court explained that when “there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.” *Id.* at 421. If such an option is in that way “obvious to try,” and the “anticipated success” results, a conclusion of obviousness may follow. *Id.* That formulation is related to, and its application must be informed by, other explanations the Court set forth about “predictab[ility]” and “known” options and their effect on obviousness determinations. *Id.* at 416 (precedent established that “when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result”); *id.* at 417 (“a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions”; referring to “simple substitution of one known element for another” as basis for obviousness).

Invoking the obvious-to-try formulation, Google argues that a relevant artisan presented with Sakata II would have realized that there are only “two options following entry of a secondary character: (1) either substitute the key with the last selected secondary character,” *i.e.*, character

substitution, or “(2) simply return the key to the default state without substituting the secondary character.” Appellant’s Br. at 50. The Board did not disagree with that characterization of options. Nor does Philips, which instead shifts the inquiry away from the question of what options are available at the last step—after a secondary character is selected—of the Sakata II process involving presentation of secondary characters in a drag menu for possible selection after an extended hold of a key. Philips asserts that there is a wide variety of keypad techniques in general. Appellee’s Br. at 51–52 (citing J.A. 2583–85).

The problem with this response is not that it lacks record support as a factual matter but that it shifts the inquiry improperly as a legal matter. Philips’s wide-scope inquiry into all keypad possibilities does not fairly reflect the point of *KSR*’s relevant discussion as it applies to a case, like this one, in which it is not disputed that a relevant artisan would in fact be studying a particular piece of prior art in thinking about the artisan’s own possible further work. In that situation, the Court’s declarations about “mere substitution of one element for another known in the field,” with “predictable results,” *KSR*, 550 at 416, indicate that the obvious-to-try inquiry at least sometimes must focus on known options at what is undisputedly the sole point of novelty in the claim at issue. Moreover, that is the inquiry we conducted in *Perfect Web*, where we asked if the sole contested step of the claim at issue was obvious to try, taking the remaining steps as a given. 587 F.3d at 1331; see also *In re Copaxone Consolidated Cases*, 906 F.3d 1013, 1025–27 (Fed. Cir. 2018) (determining that dosage and frequency limitations in method of treatment claim were obvious to try, while taking remaining limitations as a given). The same focus is appropriate in this case.

The Board did not deny, and we see no reasonable dispute in the record, that a skilled artisan would know of the return-to-default option at the last step of the ’913 patent claim. Buxton itself confirms the familiarity of the option,

though we need not rely on Buxton. *See Acer*, 2018 WL 4657646, at *10; J.A. 370. Moreover, the return-to-default option is the long-familiar function of a keyboard’s Shift key—which, while it is being held, makes available a secondary character (*e.g.*, an upper-case letter), with the primary character (*e.g.*, the corresponding lower-case letter) restored to availability when the Shift key is released. *See* J.A. 228 (¶ 177); J.A. 2537 (¶ 43). And in this case, recognition of the alternative option does not require a skilled artisan to bring to bear knowledge from outside the principal reference.

Sakata II itself asserts that the character substitution at the last step provides an efficiency benefit over the evident alternative of requiring that the secondary-character menu be summoned each time one of those characters was to be re-used. J.A. 311 (stating that by putting a selected character or symbol on the key, “when the same special character or symbol is selected again, selective input can be carried out quickly without having to perform dragging operation”). The Board so recognized the centrality of this efficiency assertion in Sakata II, *Acer*, 2018 WL 4657646, at *7, and the point has been recognized by Philips, *see* Appellee’s Br. at 17, 50; J.A. 2564–65, as well as Google, J.A. 90 (petition). This efficiency assertion is on its face a comparative one, and what is plainly being compared to the Sakata II choice is the no-substitution option—where the primary character returns to the key upon disappearance of the secondary-character menu. That is Philips’s return-to-default claim element. A relevant artisan could not avoid recognizing the existence of this option from the comparative-efficiency assertion of Sakata II. And Philips

neither identifies nor relies on nor explains the real-world substantiality of any other options at this step.²

Further, it is clear that, while the substitution option of Sakata II might be more efficient for *some* users and contexts, it might be *inefficient*, compared to the return-to-default option, for others. Which option is more efficient for a particular performance of the method at issue self-evidently will have different answers for different users, depending on whether the user is likely to use the default character more, or one of the substitute characters more, on the particular occasion. A chemist might often prefer substitution of a secondary-character “mg” for a primary-character “mm” (to use Sakata II’s example), whereas a wire maker (using Sakata II’s keyboard) might prefer the opposite while writing about diameters rather than weights. Or a writer of English prose might prefer to retain unaccented vowels as the default option, with accented forms of those vowels as the secondary characters, while a writer of international financial news might prefer to have a key for currency symbols substitute and retain a

² In this court, Google argues that Sakata II discloses the return-to-default option through the disparity between the independent claims (method claim 6, device claim 1), which leave unspecified what happens to the key after the selection of a secondary character, and the dependent claims (method claim 9, device claim 4) that include the character substitution step for that stage. *See* J.A. 307. Google made reference to the Sakata II claims before the Board, but it did not present this contention in its petition. We need not and do not rely on this argument of Google’s for our decision, and so we do not decide whether the contention was a proper one under the principles allowing reply material that answers arguments made in the patent owner’s response.

particular symbol (such as \$ or €) while writing a particular article.

Google's expert Dr. Cockburn explained this general point, while also giving some specific illustrations. *See, e.g.*, J.A. 206–07 (¶¶ 146, 147), J.A. 226 (¶ 174), J.A. 228 (¶ 177), J.A. 230–32 (¶¶ 179–181). Philips's expert, Dr. Porter, did not disagree; in fact, he seemed to recognize the absence of a one-size-fits-all efficiency solution. J.A. 3285–88. The Board, though rejecting certain specific illustrations advanced by Dr. Cockburn, *Acer*, 2018 WL 4657646, at *8–9, did not make, and lacked substantial evidence to make, a contrary finding on the general efficiency-will-vary point, which suffices for the obviousness-to-try analysis in this case. In these circumstances, there is a clear reason for a skilled artisan, knowing of the return-to-default option, to try that option. And there is no finding or argument that success would be in doubt, *see* J.A. 231–32 (evidence that implementation is readily possible), or that unexpected results would be produced.

Our decision in *Perfect Web*, though of course involving its own facts, supports our conclusion of obviousness here. In *Perfect Web*, the patented invention sought to solve the problem of sending too few or too many e-mails through bulk e-mail distribution to meet a marketing quota, and the parties collectively identified three solutions to solve the problem: (1) e-mailing an excess of recipients; (2) resending the e-mail to those addresses from which the e-mail “bounced” back; or (3) identifying a new group of addresses and sending the e-mail to them. 587 F.3d at 1331. The claims recited a four-step method for managing bulk e-mail distribution with the last step requiring that the first three steps be repeated, which encompassed the third option identified by the parties. *Id.* The parties agreed that the prior art disclosed the first three steps and not the fourth step. We conducted the obvious-to-try analysis with a focus entirely on the fourth step, and we determined that “[e]ven without experimentation, simple logic suggest[ed]”

that repeating the previous steps for managing a bulk e-mail distribution list solved the stated problem. *Id.* And because no party offered evidence to show that this repeating step exhibited “unexpected results or was not reasonably expected to succeed” there were a “finite number of identified, predictable solutions,” rendering the patented method not only obvious to try but obvious. *Id.*

Here, the record reveals only two options for what happens to a key in Sakata II’s method after the secondary character is selected: (1) character substitution and (2) returning to the default state. And “even without experimentation, simple logic suggest[s],” *id.*, that returning to the default state is a readily achievable option and often will serve the undisputed goal of “reducing the user’s burden” of obtaining the desired character, J.A. 312. We conclude, on this record, that the return-to-default alternative to character substitution would have been obvious to try and, as in *Perfect Web*, obvious.

III

We hold that claims 1 and 3–16 of the ’913 patent are unpatentable for obviousness. The Board’s decision is reversed.

The parties shall bear their own costs.

REVERSED

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**
GOOGLE LLC v. KONINKLIJKE PHILIPS N.V., 18-2213

CERTIFICATE OF SERVICE

I, Melissa Pickett, being duly sworn according to law and being over the age of 18, upon my oath depose and say that:

Counsel Press was retained by VENABLE LLP, counsel for Appellant to print this document. I am an employee of Counsel Press.

On **February 5, 2020**, counsel has authorized me to electronically file the foregoing **APPELLEE'S COMBINED PETITION FOR REHEARING**

AND REHEARING EN BANC with the Clerk of Court using the CM/ECF System, which will serve via e-mail notice of such filing to all counsel registered as CM/ECF users, including the following principal counsel for the other parties:

Aaron Maurer
Williams & Connolly LLP
725 Twelfth Street, N.W.
Washington, D.C. 20005
(202) 434-5000
amaurer@wc.com

Additionally, 18 paper copies will be filed with the Court within the time provided in the Court's rules.

February 5, 2020

/s/ Melissa Pickett _____

Melissa Pickett
Counsel Press

CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 28.1(e) and Federal Circuit Rule 28.1(b). This brief contains 3,873 words, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 35(b)(2) and Federal Circuit Rule 35.

This brief complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6), as it has been prepared in a proportionally-spaced typeface using Microsoft Word in 14-point Times New Roman font.

February 5, 2020

/s/ Justin J. Oliver _____
Justin J. Oliver
*Attorney for Appellee Koninklijke Philips
N.V.*