
Mr. Coutts contends on appeal that the Board's obviousness decision is flawed because Cheung's inventors had knowledge of a program that contained the missing claim limitation disclosed in Kang but did not disclose that feature in their patent application.

We find this argument unavailing. The Board correctly found that the 35 U.S.C. § 103 (2012) obviousness test is not controlled by what a prior art inventor would have done based on the teachings of the references or anything else. Instead, the relevant inquiry is what a hypothetical person having ordinary skill in the art would find obvious based on the teachings of the references. In applying this standard, we find that the Board correctly affirmed the Examiner's rejection.

**BACKGROUND**

A. Technology

In August 2007, Mr. Coutts filed for a patent on an invention to “computerized methods and systems for displaying information on a user's computing device.” US Patent Application No. 11/836,293 (‘293 Application) [0003]. The claimed software program compiles and chronologically lists notifications from various software applications in one display location
and also allows the user to easily access the software application corresponding to a particular notification (e.g., with a click). *Id.* at [0007].

Claim 20 is the only independent claim and is representative of Mr. Coutts’s claims:

20. A method of handling notifications to a user of a computing device, comprising, the method implemented in a first application program executing on the computing device, the method comprising:

receiving a first notification from a second application program and responsive to receiving the first notification, integrating a first headline into a sequence of headlines wherein the first headline corresponds to the first notification and wherein the first headline comprises a first time indication and wherein the first time indication is based on the time when the first notification is received and wherein the first headline comprises at least five characters;

receiving a second notification and responsive to receiving the second notification, integrating a second headline into the sequence of headlines, wherein the second headline corresponds to the second notification and wherein the second headline comprises a second time indication and wherein the second time indication is based on the time when the second notification is received and wherein the second headline comprises at least five characters;

receiving a third notification and responsive to receiving the third notification, integrating a third headline into the sequence of headlines wherein the third headline corresponds to the third notification and wherein the third headline comprises a
third time indication and wherein the third time indication is based on the time when the third notification is received and wherein the third headline comprises at least five characters;

displaying the sequence of headlines in a first window on a display associated with the computing device, the displaying such that the headlines with later time indications are displayed above headlines with earlier time indications in the plane of the display and wherein the displaying is such that the first, second and third headlines are visible in the first window and wherein the displayed sequence of headlines is scrollable by the user; and

receiving a plurality of indications of user interaction with the displayed sequence of headlines and responsive to reception of a first indication of user interaction with the first headline, signaling the second application program wherein the second application program responds to the signaling by causing a second window to be displayed on the display by an application program other than the first application program and wherein the second window is displayed in a different area on the display than the first window and wherein the displayed sequence of headlines is still visible.

Appx17–18. 1

B. Prior Art Rejection

The Board affirmed the Examiner’s rejection of the pending claims under § 103 for obviousness over Cheung in combination with Kang and Awada. SAppx003–007.

1 “Appx” refers to the appendix filed by Appellant, and “SAppx” refers to the appendix filed by Appellee.
Cheung teaches a central notifications management program that “present[s] and manag[es] notifications and alerts from a plurality of different sources in a consistent and uniform format.” U.S. Patent Application No. 2004/0061716, Abs. Cheung teaches generating a central, scrollable list of alerts and notifications from different, independent sources. Id. at ¶¶4, 28–29, 33, 35. If a user clicks on a link in the list, the program responds by causing a second window to open, for example to launch a second program such as a web browser related to the notification. Id. at ¶¶30, 35, 46, Figs. 5A, 8C. Reminder notifications of meetings or to-do items are displayed with their deadlines, in order of the deadlines. Id. at Fig. 5A; ¶ 35.

The Examiner found that Cheung teaches all elements of Claim 20, except for two: the non-overlapping display windows and the time-received display limitations. SAppx003–007. The Examiner found that Awada teaches the non-overlapping display windows limitation and articulated a motivation for a person of ordinary skill to modify Cheung with Awada. SAppx005. The Examiner also found that Kang teaches the time-received display element of Claim 20 because Kang’s system identifies messages by the time and date of receipt or transmission and lists this information along with the title of an email message or a part of an SMS message. SAppx005–006; U.S. Patent Application No. 2002/0152220 ¶¶31, 32, 36, Figs. 2–5. Mr. Coutts does not dispute these findings.

The Examiner further found that it would have been obvious to a person of ordinary skill at the time of the invention to include Kang’s teachings in the Awada-modified Cheung interface in “an effort to assist [the] user in organizing and managing notifications.” SAppx006. This is the finding that Mr. Coutts contends was incorrect.
For dependent claims 21–24 and 27–30, the Examiner evaluated the additional limitations of each claim independently, and found that the additional limitations recited in claims 21–24 and 28–30 were disclosed by Cheung and that the additional limitation in claim 27 was disclosed by Kang. SAppx006–007.

As such, the Examiner rejected claims 20–24 and 27–30. SAppx003.

C. Procedural History

Following the Examiner’s rejection, Mr. Coutts argued to the Board that, at the time of Cheung’s invention, Cheung’s inventors knew of the feature of displaying a list of messages with corresponding receipt time indications, did not claim the feature in their patent application, and therefore, the combination of Cheung and the feature could not have been obvious. Appx38.

Specifically, Mr. Coutts argued that Cheung had either actual or constructive knowledge of the chronological feature because: (1) Cheung described his system using the program Microsoft Outlook®, which at the time included the feature of displaying a list of email messages chronologically with receipt time indications; (2) a reference in the Information Disclosure packet for the Cheung application included an image of the Microsoft Outlook® inbox with the list of email messages displaying according to corresponding receipt time indications; and (3) Cheung was a technology worker developing user interfaces for messaging and notification systems and would have used an email program to communicate with his co-workers
that listed email messages with receipt time indications. Appx38–39.2

Mr. Coutts argued that Cheung’s likely knowledge of the option of displaying messages chronologically meant that “if it was obvious to Cheung to display a receipt time indication on his notifications he surely would have included such.” Appx39. Mr. Coutts supported his argument by citing to dicta in In re Kleinman, stating that “it might very well be a significant point in weighing the content of a patent as a reference if it can be demonstrated that an inventor had actual knowledge of relevant art.” 484 F.2d 1389, 1392 (CCPA 1973).

The Board explained that the “the test for obviousness is not what Cheung would have done based on the teachings of Kang (or even Microsoft Outlook®). Rather, the test is what one of ordinary skill in the art would have done based on the combined teachings of the references.” Appx11. Since, by Mr. Coutts's own admission, numerous examples existed of programs that organized notifications chronologically by receipt date and time at the time of the '293 Application invention (e.g., Microsoft Outlook®, Kang, Fig. 1B of the '293 application depicting prior art that the invention improved upon), “displaying messages or other information based upon date or time ordering seems to be a conventional technique.” Id. The Board found that Cheung’s lack of any discussion as to displaying notifications by receipt time indication for Cheung’s own invention was not relevant to the question of whether using such a conventional technique would be obvious. Appx11. Accordingly, the Board affirmed the Examiner’s rejection.

2  Mr. Coutts made the same points during prosecution of the patent, but the Examiner still rejected the claims. Appx39.
Mr. Coutts then filed a Request for Rehearing with the Board, and the Board denied the request. In its denial decision, the Board more fully evaluated In re Kleinman and found that “while Kleinman . . . noted that the inventor’s knowledge of the relevant art ‘might very well be a significant point in weighing the content of a patent as a reference,’ . . . we do not find that is the case here.” Appx15.

Mr. Coutts now appeals the Board’s decision.

We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) (2012) and review the Board’s findings for reversible error. In re Watts, 354 F.3d 1362, 1369 (Fed. Cir. 2004). Whether an invention would have been obvious is a legal conclusion based on underlying factual findings. Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966). The scope and content of the prior art are questions of fact. Id.; In re Mouttet, 686 F.3d 1322, 1330 (Fed. Cir. 2012). This Court upholds fact findings made by the Board that are supported by substantial evidence, 5 U.S.C. § 706(2)(E), and reviews the Board’s legal conclusions de novo. In re Gartside, 203 F.3d 1305, 1315–16 (Fed. Cir. 2000). Substantial evidence is “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” In re Zurko, 258 F.3d 1379, 1384 (Fed. Cir. 2001) (citing Consol. Edison Co. v. NLRB, 305 U.S. 197, 229 (1938)).

**DISCUSSION**

In the instant appeal, Mr. Coutts argues that the Board erred in “essentially” finding that “the actual knowledge of the primary reference inventor and what the primary reference inventor did or did not do with that knowledge is never relevant in the § 103 analysis.” We disagree with this characterization of the Board’s decision. Rather, the record demonstrates that the Board did consider the evidence of Cheung’s knowledge of the feature of displaying a list of messages with corresponding
receipt time indications and concluded that such evidence, in combination with other evidence, actually indicated that the feature was a “conventional technique” and furthered the Examiner’s finding that a person of ordinary skill would find the combination obvious. Appx10–11; see also infra at 11–12.

The § 103 test for obviousness is whether “the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103. If so, the patent is obvious and invalid.

The standard is “objective,” meaning that it is not tied to the knowledge of any one person or the actual inventor. KSR Int’l Co., 550 U.S. 398, 406–07 (2007). The hypothetical person is an “an imaginary being possessing ‘ordinary skill in the art’ created by Congress to provide a standard of patentability.” Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1453 (Fed. Cir. 1984). It is a “legal construct . . . akin to the ‘reasonable person’ used as a reference in negligence determinations.” In re Rouffet, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

This is not to say that an individual inventor’s or expert’s individual knowledge is irrelevant. Such knowledge could go to showing whether a person of ordinary skill would have that knowledge as well. It also could be relevant if the inventor or expert has knowledge, but specifically explained why he did not claim the limitation (e.g., because he had reason to think it would not work or that it was too obvious to patent). But this Court has used such consideration with some caution because “[r]eal inventors, as a class, vary in their capacities from ignorant geniuses to Nobel laureates.” Kimberly-Clark Corp., 745 F.2d at 1453. Similarly, a particular expert’s personal preference or likelihood of combining references
is not conclusive. See, e.g., Norgren Inc. v. Int’l Trade Comm’n, 699 F.3d 1317, 1327 (Fed. Cir. 2012). The standard is, and has always been, what an objective person of ordinary skill in the art would know. Thus, the knowledge of any prior art inventor is but one piece of evidence in determining what a person of ordinary skill would know and would be likely motivated to do.³

³ None of the cases cited by Mr. Coutts are at odds with this understanding. In In re Kleinman, the appellants argued that had the prior art author known of cyanoacrylate monomers as suitable for spraying with aerosol propellants, they would have surely disclosed it. 484 F.2d at 1391–92. Our predecessor court, the Court of Customs and Patent Appeals, found that there was no presumption that a prior art inventor knew of such monomers, and that a prior art inventor is not assumed to have the knowledge of a person of ordinary skill. Id. at 1392. The Court then affirmed the rejection under § 103, and opined in dicta that, had there been any evidence that the inventor knew of such monomers, the evidence would go towards “weighing the content of a patent as a reference.” Id. In re Kleinman does not suggest that a finding of non-obviousness is then mandatory.

The Board cases presented by Mr. Coutts are not binding on this court; regardless, they do not suggest error in the Board’s findings in this case. In Ex parte Skiffington, Ex parte Mahdi and Ex parte Xingwang, the Board opined that evidence of a prior art inventor’s knowledge could be relevant to obviousness, but since appellants had no such evidence, the claims were correctly rejected. 2008 WL 4759865 at *6 (Bd. Pat. App. & Interf. 2008); 2012 WL 1652569 at *3 (Bd. Pat. App. & Interf. 2012); 2012 WL 1338663 at *6 (Bd. Pat. App. & Interf. 2012).
The Board correctly applied this legal standard.

Further, the Board did take into account Cheung’s possible knowledge of the option of organizing notifications by receipt date/time, but found that such evidence actually substantiates the Examiner’s finding that a person of ordinary skill would find the combination obvious. Appx11. Cheung’s possible knowledge of prior art

In In re Lower, there was actually evidence that a prior art inventor knew of a possible feature, but did not claim an invention with that feature. 1997 WL 1943503 at *4 (Bd. Pat. App. & Interf. 2012). But, unlike this case, the basis for the Examiner’s § 103 rejection was solely that one piece of prior art. Id. at *2. Thus, the Board found that since the prior art did not describe or claim the feature, the reference alone was not enough to render the claims unpatentable. Id. at *5. Lower, as the Solicitor accurately describes, is about the scope of one piece of prior art and if it, on its own, renders the applied-for claims obvious. This is not analogous to the issue here.

We agree with the Solicitor that it is not clear that Cheung’s inventors had actual knowledge of the feature of Microsoft Outlook® that lists email messages in the order received and indicating the time they were received. Cheung’s specification references Microsoft Outlook® for its ability to generate reminder notifications for tasks, rather than its organization of emails, and Cheung’s inventors may not have looked very closely at the figures in the dozens of references contained in the Information Disclosure. U.S. Patent Application No. 20004/0061716 at ¶¶30, 85, Fig. 3A. However, the Solicitor concedes that the record “at least establishes constructive knowledge,” which is the same level of knowledge of the prior art that the hypothetical person having ordinary skill in the art is presumed to have. Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc., 807 F.2d 955, 962 (Fed. Cir. 1986).
Microsoft Outlook® which organized email notifications chronologically, combined with the existence of Kang disclosing the same limitation, and Mr. Coutts’s own depiction of prior art that did so in Fig. 1b of the ’293 Application all serve as evidence that this limitation was well-known, conventional, and that a person of ordinary skill would know the same. *Id.*

Further, as the Solicitor points out, there are a number of reasons why Cheung would have knowledge of the limitation but not claim it in his patent application, including that it might have been an obvious variation of his disclosed invention. It is not so logically clear to conclude, as Mr. Coutts argues, that Cheung’s lack of including the limitation is indicia of non-obviousness.

The Board’s weighing of these facts, including Cheung’s knowledge, to determine what a person of ordinary skill would have known, and would have been motivated to do, is supported by substantial evidence.

We have considered Mr. Coutts’s remaining arguments, and find them unpersuasive. Thus, we find no error in the Board’s decision.

**CONCLUSION**

For the foregoing reasons, we affirm the Board’s decision finding claims 20–24 and 27–30 of Application No. 11/836,293 properly rejected as obvious under § 103.

**AFFIRMED**

**Costs**

No costs.