

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner,

v.

CONTENTGUARD HOLDINGS, INC
Patent Owner.

Patent No. 7,523,072

Inter Partes Review No. IPR2015-00445

Petitioner's Motion for Rehearing

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CTD	Customer Transaction Device
CTA	Customer Trusted Agent
MTD	Merchant Transaction Device
MTA	Merchant Trusted Agent
SGML	Standard Generalized Markup Language

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I. Introduction

On July 9, 2015, the Board denied institution of *inter partes* review on certain claims of U.S. Patent No. 7,523,072. *See* Paper 9 (“Dec.”). It found, *inter alia*, that the Petition did not adequately explain the differences between each prior art reference and the challenged claims, and how each reference taught or suggested the limitations of the claims. *Id.* at 8-9. Key to the Board’s reasoning was its criticism of the Petition for comparing the contested claims to a “hypothetical” system suggested by the combined teachings of Rosen (Ex. 1020) and Hartrick (Ex. 1021). Dec. at 9-12. But it was entirely proper for the Petition to compare the claims to what is suggested by the *combined* teachings of the prior art, rather than to compare the claims to each reference in isolation. Indeed, every case of obviousness implicates a comparison of the claims to a “hypothetical” system that differs from what is actually described in any one prior art reference; otherwise the claims would be anticipated by that one reference.

Rehearing is respectfully requested because the Board used an improperly rigid standard to measure the obviousness grounds presented in the Petition. Doing so caused it to overlook or misapprehend substantial portions of the Petition which explained in detail how the prior art references either individually described or together suggested each element of the contested claims. *See* 37 C.F.R. §42.71(d); IPR2015-00173, *Daicel Corp. v. Celanese Int’l*, Paper 15 at 2 (2105). These

sections of the Petition not only identified the differences between the primary reference (Rosen) and the claims, but explained why the person of skill would have modified Rosen. Pet. at 22-23, 38-44. As the Petition explained, Rosen did not explain how to implement its “usage” field functionality, but the skilled person would have looked to Hartrick to fill this gap. Pet. at 23. The modifications of Rosen explained in the Petition thus were not a hindsight reconstruction of the claims, but were instead the consequence of a single change: filling Rosen’s sole gap with Hartrick’s usage rights functionality. *Id.* at 38-44.

The Board also unfairly criticized the form of the Petition and supporting evidence, echoing Patent Owner’s skewed assertions about its contents. No rule requires a petition to present an analysis in a certain order or prohibits use of internal citations. And, contrary to Patent Owner’s assertions, the descriptions in the Petition—which included a detailed analysis of the prior art, an explanation of the motivation to combine the references, and a detailed comparison of their combined teachings to the claims—were clear, well-organized, understandable and supported by direct citations to Rosen and/or Hartrick, and to evidence showing how a person of ordinary skill would have understood their interrelated teachings.

Accordingly, Apple requests that the Board withdraw the Decision and institute trial on claims 1 and 8 of the ’072 patent as obvious over Rosen and Hartrick. Apple requests institution on these claims because they are the only

claims of the '072 patent still asserted in district court; its decision not to seek institution on the other claims is in no way an admission that denial was warranted.

II. The Petition Properly Established the Claims Were Obvious

A. The Board Overlooked that the Petition Identified the Gap Between Rosen and the Claims and How Hartrick Filled that Gap

Echoing Patent Owner's mischaracterizations of the Petition, the Board found that it did not identify what elements of the claims were missing from Rosen. See Prelim. Resp. (Paper 8) at 6, 41-43; Dec. at 10. But in the very first paragraph that discussed Rosen, the Petition did precisely this: it explained that Rosen teaches a system where content is distributed "with a decryption ticket that has a 'Usage' field that specifies 'restrictions on usage of the electronic object'", but Rosen *does not teach* "how those restrictions are specified or enforced." Pet. at 22-23. The Petition then explained that the skilled person would have sought to fill this gap of Rosen by looking to Hartrick. *Id.* It then explained what portions of each reference would have been considered by the skilled person (*id.* at 23-38), how that person would have modified Rosen to address its gap (*id.* at 38-44), and presented an element-by-element comparison of the claims to the prior art, indicating which elements were identically disclosed in Rosen alone, and which were suggested by the combined teachings of Rosen and Hartrick. *Id.* at 44-60.

The Board also failed to appreciate the Petition actually described a single change to Rosen: integrating Hartrick's usage rights specification and enforcement

features to support Rosen's "Usage" field. *Id.* at 23, 25, 38-40. The Petition explained doing this would cause the skilled person to make four modifications to Rosen. The first three relate to how a person of skill would have *specified* and *enforced* usage rights in the modified Rosen system (*i.e.*, using Hartrick's SGML tags within the Rosen "Usage" field and adding Hartrick's royalty payment and billing programs to the trusted agents). *Id.* at 38-44. These are not independent modifications driven by hindsight—they are the logical consequence of combining Hartrick and Rosen. *Id.*; *cf.* Dec. at 11-16. Importantly, the Petition provided detailed reasons why a skilled artisan would have integrated specific features of Hartrick into a specific aspect of Rosen. For example, it explained that a skilled person would have integrated Hartrick's royalty payment program into Rosen's trusted agents because the latter already enforce security protocols. Pet. at 41-42. That person would have integrated the royalty payment program into both CTAs (allowing enforcement on customer devices, as taught by Rosen) (*id.*) and MTAs (allowing enforcement when an author deposits content, as taught by Hartrick) (*id.* at 42-43). The Petition explained that, in integrating Hartrick's functionality into Rosen, the SGML tags could have been configured in two ways (one as disclosed in Hartrick and a second being an obvious variation thereof). *Id.* at 38-40 (SGML was known to be "highly configurable" way to specify usage rights).

Instead of viewing these changes for what they were stated to be in the

Petition – a description how the skilled person would have implemented Rosen’s “Usage” field using elements from Hartrick – the Board considered the modifications to be “additional modifications” unsupported by sufficient reasoning. Dec. at 13; Prelim. Resp. at 46-47. The Board thus misapprehended that these passages of the Petition were simply explaining how and why a skilled person would have added Hartrick’s functionality into parts of Rosen.

The fourth modification concerned the manner of certificate exchange process that would be used in a Rosen system modified to incorporate Hartrick elements. Here, the Petition explained the skilled person could have adapted Rosen to use any known certificate exchange process, including by changing the order of exchange of certificates, with no change in Rosen’s functionality. Pet. at 44. It also explained this was a predictable modification that such person would ordinarily perform. *Id.* Here, the Board overlooked the well-settled law that holds that if a skilled artisan can implement a predictable variation, that variation likely is obvious. *KSR Int’l v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007).

The Board also criticized “the extent of the proposed modifications” described in the Petition and attributed them to hindsight. Dec. at 15; Prelim. Resp. at 44-46. As noted above, that was based on a misunderstanding of the changes being proposed. Moreover, it is legally irrelevant that a “hypothetical combination of [references] requires extensive modification”; “the proper inquiry

should not be limited to the specific structure shown by the references, but should be into the concepts fairly contained therein.” *In re Bascom*, 230 F.2d 612, 614 (CCPA 1956); *KSR*, 550 U.S. at 424 (“the interaction of multiple components means that changing one component often requires the others to be modified as well”). Here, the Petition explained that each modification flowed from the single change of implementing Rosen’s “Usage” field based on Hartrick. Pet. at 38-40. The Petition set forth sufficient reasoning for combining Rosen and Hartrick, and the Board’s disregard of them represent an abuse of discretion. Dec. at 9, 15-16.

B. The Board Measured the Petition Using an Improper Standard

As noted above, the Board found a significant deficiency of the Petition to be that it failed to identify the differences between the challenged claims and each prior art reference considered alone, and instead compared the claims to a “hypothetical” system suggested by the combination of the references. *See* Dec. at 10 (finding Petition deficient for not identifying “claim limitations [that] are absent from Rosen or Hartrick” with “particularity” and for “obscur[ing] any comparison of the individual prior art references to the claim limitations”); *id.* at 6-7 (criticizing description of combined Rosen/Hartrick system). As explained in § II.A, above, that description of the Petition – which echoes Patent Owner’s criticisms (Paper 8 at 6, 42-43) – is simply incorrect.

The Board’s requirement for a particular form of proof of differences – an

identification of which claim elements differ from each reference considered individually – was legally improper. It is perfectly permissible under the law of obviousness to first explain how a person of skill would have considered the combined teachings of two references, and then compare the combined teachings of those references to the claims. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not ... that the claimed invention must be expressly suggested in any one or all of the references. Rather, *the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.*”); *In re Kaslow*, 707 F.2d 1366, 1374 (Fed. Cir. 1983) (discussing a “hypothetical combination” of references); *Bascom*, 230 F.2d at 614 (same); *Nest Labs v. Allure Energy*, IPR2015-00181, Paper 6 at 23 (2015) (finding a claim element was taught by a combination of references); *Facebook v. Software Rights Archive*, IPR2013-00481, Paper 54 at 20 (2015) (“One cannot show non-obviousness by attacking references individually where the challenge is based on a combination”), 23 (“we determine that [three references], taken together, teach” a claim element). This is why *Graham v. John Deere*, 383 U.S. 1 (1966) calls for a comparison of the claimed invention to “the prior art,” which *collectively* may suggest embodiments or features not described in any individual reference. And, of course, obviousness inevitably requires a comparison of the claims to something that does not actually exist and is not disclosed in a single item of prior art (*i.e.*, a

“hypothetical”), otherwise there would be anticipation of the claims.

The Board’s demand for a formalistic identification of distinctions from each reference also cannot be reconciled with *KSR Intern. Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007) and subsequent cases, which reject such formalistic proofs. *Id.* at 419 (if “a court transforms [a] general principle into a rigid rule that limits the obviousness inquiry . . . it errs”). Indeed, the Federal Circuit reversed the Board for employing a similarly restrictive standard in other cases. For example, in *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (2013), it held it was error for the Board to employ a “blinkered focus on individual documents” rather than “read[ing] the prior art in context.” *See KSR*, 550 U.S. at 406 (“the scope and content of ***the prior art***...; differences between ***the prior art*** and the claims...”). An obviousness inquiry also should be flexible and fit the facts of each case. *See Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007).

By evaluating the Petition using an impermissibly rigid form of proof, the Board misunderstood substantial portions of it. For example, the Board gave little weight to the 20+ pages of the Petition (Pet. at 22-44) that described the scope and content of the prior art (*see* Dec. at 7, 13-14), finding that discussion was too far “removed” from the language of the challenged claims (*id.* at 7). *See id.* at 13-14 (not considering pages 22-44). But analyzing the scope and content of the prior art as it would have been understood by a skilled person and ***without*** reference to the

claims is **required** under *Graham*. Likewise, the Board did not appreciate the Petition’s explanations of how the skilled person would have “look[ed] to interrelated teachings of multiple [references]” in comparing the prior art to the claims. *KSR*, 550 U.S. at 418. By not giving these explanations weight, the Board committed significant legal error. *Randall Mfg.*, 733 F.3d at 1362.

C. The Petition Identified How the Claimed Invention Differed from the Prior Art and Why It Would Have Been Obvious

The Board seemed to not accurately appreciate the content of the Petition due to Patent Owner’s mischaracterizations of it. Prelim. Resp. at 6. In addition to overlooking the Petition’s identification of what claim elements were missing from Rosen (Dec. at 10), the Board seemed to not appreciate that the Petition precisely followed the proofs required in *Graham*. The Petition first explained that while Rosen alone teaches many elements of the claims, including “using trusted devices containing tamper-resistant processors, permanently attaching usage information to each copy of content, and using digital certificates to initiate secure channels” (Pet. at 22-23), it does not describe techniques for specifying and enforcing usage information. The Petition, however, explained such techniques were well-known, and that a skilled person would have turned to known sources of such techniques, of which Hartrick was one. *Id.* at 23, 38-40. It also set forth a detailed and objective description of the scope and content of the prior art as it would have been understood by a person of ordinary skill: it described Rosen and Hartrick in detail,

“quote[d] heavily from each reference” (Dec. at 6), and explained how a skilled artisan would have understood certain portions of the references. Pet. at 23-38 (§§ IV.A-B). And it described the interrelated teachings of the art, without reference to the claims, explaining how and why a skilled person would have implemented Rosen’s “Usage” field using Hartrick’s usage rights specification and enforcement elements. *Id.* at 38-44 (§ IV.C). The Petition thus explained that a skilled artisan would have been motivated to fill the clearly identified gap in Rosen by looking to Hartrick. Analogous reasons to combine references have been found persuasive by the Board. *See* IPR2014-00270, *Handi-Quilter, Inc. v. Berina Int’l AG*, Dec. on Rehr’g (Paper 17) slip op. at 17-18 (2014) (finding it obvious to combine a patent disclosing a “sensor” with a reference describing how a sensor worked). Given these facts, it made no sense to compare Rosen alone to the challenged claims, as that comparison adds nothing to the obviousness calculus. *See KSR*, 550 U.S. at 418 (an obviousness “analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim”).

The Petition then properly compared the ***combined*** teachings of the prior art to the challenged claims, precisely as *Graham* requires, mapping elements of Rosen, Hartrick, or their interrelated teachings to each element of the challenged claims using a two-step process. It first compared the prior art to key claim terms

(Pet. at 44-51, § IV.D),¹ and then to each claim limitation (*id.* at 51-60, § IV.E). It supported the analysis by citing ***directly*** to the passages in Hartrick or Rosen, and to the objective descriptions of the prior art teachings in earlier sections of the Petition. The Petition also clearly stated whether each claim element was ***disclosed*** by Rosen or would have been ***suggested by the combination*** of Rosen and Hartrick. *E.g.*, Pet. at 51-57. Unlike cases cited by the Board, where petitions contained many grounds or incomplete analyses (Dec. at 7-8, 10), this Petition presented ***a single ground*** and included a complete analysis of the prior art, motivation to combine, and comparison to the claims. The cites to the Sherman Declaration support the analysis but are not required to understand it.

Despite this, the Board found the Petition’s analysis of the differences between the prior art and the claims to be deficient, contending the claim mappings were “three levels removed” from the references. Dec. at 7. This is simply incorrect – the Petition cited ***directly*** to the relevant passages of Rosen and Hartrick in this analysis. For example, the Petition explained:

The Rosen CTAs and MTAs have transaction applications for rendering content (*id.* [Ex. 1020] at 8:22-34, 7:65-8:7), and, based on

¹ The Board used this approach in earlier proceedings involving Stefik patents, addressing the term “repository” before the claims as a whole. *See* IPR2013-00139, Paper 15 at 29-30 (July 9, 2013), Paper 57 at 26-29 (June 26, 2014).

the guidance within Hartrick, a person of skill would have configured the CTA to enforce the “Usage” field of the decryption ticket when rendering content (“*securely rendering digital documents*”). See § IV.A.3, B.3, C; **Ex. 1021 at 6:9-22, Fig. 1, 3:30-32, 3:53-4:9**; Ex. 1013 at ¶ E117-118, E142, E20, E183-185, E187.

Pet. at 51-52 (emphasis added). This sentence explains that Rosen’s transaction applications perform the claimed “rendering” and that the trusted agent in a transaction device enforces usage rights (*i.e.*, “securely render[s]”) when it includes Hartrick’s functionality. For each point, the Petition cites directly to each reference: Rosen’s transaction applications (Ex. 1020 at 8:22-34, 7:65-8:7), and Hartrick’s royalty payment program (Ex. 1021 at 6:9-22, Fig. 1) and SGML security tags (*id.* at 3:30-32, 3:53-4:9). The Petition described these features and how a skilled person would understand them in the listed sections of the Petition (*i.e.*, Rosen in § IV.A.3; Hartrick in § IV.B.3; interrelated teachings in § IV.C).

The Board also criticized the Petition’s structure and use of internal citations. Dec. at 5-8. But it has accepted this manner of presenting grounds in numerous other petitions, and several issued Board decisions have used a similar structure and citation format. *E.g.*, *Actifio, Inc. v. Delphix Corp.*, IPR2015-00128, Paper 1 at 9-60; IPR2015-00128, Paper 7 at 25-30; IPR2015-00108, Paper 1 at 11-59; IPR2015-00026, Paper 1 at 11-60; *Nest Labs v. Allure Energy Inc.*, IPR2015-00181, Paper 1 at 18-20, 40, 43-45, 54-57 (citations); IPR2015-00181, Paper 6 at

18-27; *Facebook v. Software Rights Archive*, IPR2013-00481, Paper 54 at 15-19.

The Petition thus clearly identified “the evidence that supports ... the challenge to each claim,” as required by 35 U.S.C. § 312(a)(3) and Rules 42.104(b)(4)-(5), and explained that evidence’s significance per Rule 42.22(a)(2). *Versata Dev. Group, Inc. v. SAP Am., Inc.*, No. 2014-1194, slip op. at 45 (Fed. Cir. July 9, 2015) (cautioning against substituting a “hyper-technical adherence to form” for “an understanding of substance”). The rigid obviousness formula advocated by Patent Owner and used by the Board was improper because it does not fit the facts of Rosen and Hartrick, or account for the features of the challenged claims. Because the Board’s decision overlooked and misapprehended the arguments and evidence presented, and was “based on an erroneous interpretation of law,” rehearing is warranted. *Daicel Corp.*, IPR2015-00173, Paper 15 at 2.

D. The Board Misapprehended the Mapping of Key Claim Terms

The Board misapprehended the analysis in § IV.D, believing it to propose additional modifications. Dec. at 13. It did not – § IV.D simply maps portions of Rosen, Hartrick, and their combined teachings to two key claim terms (“repository” and “usage rights”). *See, e.g.*, Pet. at 44-50; *cf.* Dec. at 6, 13.

Regarding “usage rights,” the Petition explained Hartrick and Rosen taught the five elements of “usage rights.” First, Hartrick taught: (1) “statements in a language” (Pet. at 47 (“specialized SGML tags”)), (2) a “manner of use” (*id.* at 44-

45 (the “‘Do Not Copy’ tag grants [] the right to display and the ‘Do Not Distribute’ tag grants the right to display and print”)), and (3) “conditions” (Pet. at 45-46 (the “royalty tags”); *see id.* at 40-41). Next, it explained Rosen and Hartrick each suggest: (4) “permanently attached” usage rights (*i.e.*, via the “Usage” field to content on a customer device (Rosen) and by attaching usage rights (SGML tags) to content on a merchant device (Hartrick) (Pet. at 46; *see id.* at 39, 41-43 (§ IV.C, describing same))). Finally, it explained: (5) that usage rights “enforced” by a repository is suggested by a Rosen system that integrates the royalty payment program of Hartrick (*id.* at 47; *see id.* at 41-43 (§ IV.C, describing same))).

Regarding “repositories,” the Board found the transaction device and trusted agents to be separate devices (Dec. at 13-14). This was contrary to the explanation in the Petition, which demonstrated the trusted agent to be *a component* of a transaction device that provides security services to the *device*; and together, the trusted agent and the transaction device form a *single device*. Pet. at 26-27. The Board also did not appreciate that the Petition had explained that Rosen in view of Hartrick suggests enforcing of usage rights by the Rosen “repository.” *Id.* at 49-50. It also explained that Rosen teaches that trusted agents allow each transaction device to have the three integrities, namely: (i) physical integrity (*i.e.*, each device contains a tamper-resistant trusted agent that stores and regulates access to decryption tickets, stores content in encrypted form and cannot access that content

unless its trusted agent allows access to the key stored in the decryption ticket) (*id.* at 47-48; *see id.* at 26-28); (ii) communications integrity (*i.e.*, when transferring content, a sending device's trusted agent validates the recipient's digital certificate before permitting transfer via an encrypted channel (*id.* at 48-49); the digital certificate is issued by a "Trusted Authority," which certifies which devices can be trusted (*id.* at 28-29)); and (iii) behavioral integrity ("no electronic object, including software, can be installed on a transaction device unless it has a digital certificate and a valid signature authenticating its source and integrity" (*id.* at 49). The Petition explained that Hartrick's book viewing software, like all software, would be distributed as an electronic object, and could not be installed in a Rosen device without a digital certificate. *Id.* Patent Owner also admitted doing so would have been obvious. Prelim. Resp. at 42-43. Also, each "decryption ticket contains a digital signature of the electronic object and the certificate of the trusted agent that created the ticket," and a trusted agent will delete an electronic object (*e.g.*, software) if the signature or certificate is invalid. Pet. at 49. Thus, the Petition established that Rosen in view of Hartrick met every element of of the claims.

III. Conclusion

Because the Board overlooked the arguments and evidence in the Petition and abused its discretion by employing a legally improper obviousness standard, Petitioner respectfully requests that the Decision be set aside, and trial instituted.

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Respectfully Submitted,

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