

CASE IPR2025-00857
U.S. Patent No. 10,943,058

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

FERID ALLANI,
Patent Owner

IPR2025-00857

DECLARATION OF MAHDI ESLAMIMEHR

CASE IPR2025-00857
U.S. Patent No. 10,943,058

1. INTRODUCTION

1. I have been retained on behalf of Ferd Allani (“Allani” or “Patent Owner”) for the above-captioned *inter partes* review (IPR) proceedings filed by Apple Inc. (“Apple” or “Petitioner”). As an expert in computer science, I have been asked to provide analysis and opinions related to whether certain claims of U.S. Patent No. 10,943,058 (“the ’058 Patent”) are anticipated or rendered obvious by certain prior art asserted by Apple.

2. I submit this declaration as a statement of the opinions I have formed and the factual basis for the opinions. I understand that this declaration is submitted in regard to Ferid Allani’s Patent Owner Response to: Petition for *Inter Partes* Review of U.S. Patent No. 10,943,058 (IPR2025-00857). I am prepared to testify as to the matters discussed in this declaration.

3. My employer, Quandary Peak Research, is paid a consulting fee for my time working on this matter. I have no personal interest in this matter, and my compensation does not depend in any way on the opinions I express or the outcome. I am being compensated for my time at the rate of \$600 per hour.

2. SUMMARY OF QUALIFICATIONS

4. I am a computer scientist, engineering executive, and testifying expert whose career spans academic research, large-scale software product engineering, and extensive work before U.S. courts, the ITC, and the USPTO. I hold a Ph.D.

in Computer Science from UCLA, an M.S. in Computer Science from Linköping University, and an MBA from the London School of Economics, complemented by executive programs in Leadership, Business Management, and Strategy Execution at Harvard Business School. In academia, I serve as Adjunct Professor at the University of Southern California, where I teach Requirements Engineering, Advanced Software Engineering, and Software Management and Economics for grad students; previously, I taught Software Engineering and Object-Oriented Design Patterns at Cal Poly Pomona. My research and publications (including a Best Paper Award in software reliability engineering) center on software analysis, testing, and web and mobile application architectures, topics directly relevant to the technologies at issue in this matter. Professionally, I am Executive Vice President at Quandary Peak Research, leading teams of software professionals in complex software disputes (patent, trade secret, copyright, and contract) and in rigorous technical due diligence and audits for investors and enterprises. Before that, as CTO and later CTO/COO of a global telecommunication software company, supporting millions of subscribers through our OSS/BSS platforms, and oversaw multi-region delivery and R&D, experience that grounds my opinions in the realities of designing, deploying, and scaling web and mobile systems. Earlier industry roles at SAP Labs, Samsung R&D, and Ericsson deepened my hands-on expertise with

client–server frameworks, runtime systems, and telecommunication solutions. I have been retained as a testifying expert in over 100 matters across federal courts, the ITC, and arbitrations, providing reports, declarations, depositions, and trial testimony in disputes involving web and mobile platforms, AI, networking, embedded systems, and cloud service. Taken together, my formal training, university teaching in software engineering and requirements engineering, executive leadership in building and operating real-world software systems, publication record, and extensive testimonial history meet the level of a person of ordinary skill in the art (“POSITA”). A detailed list of my qualifications is set forth in my curriculum vitae, a copy of which is submitted as Exhibit 2017. Therefore, I believe I am qualified to express expert opinions related to the ’058 Patent.

3. INFORMATION CONSIDERED

5. In forming my opinions, I have considered:

- U.S. Patent Nos. 10,943,058 and its file history.
- Apple’s Petition for *Inter Partes* Review of U.S. Patent No. 10,943,058 (IPR2054-00857) and the materials cited in the Petition.
- Exhibits 1001 to 1043 to the Petition.
- The Institution Decision for *Inter Partes* Review of U.S. Patent No. 10,943,058 (IPR2054-00857) and the materials cited in the Decision.

- My education, training, and experience in the field.
- Other materials cited in this declaration.
- Deposition Transcript of Dr. Benjamin B. Bederson dated February 19, 2026.

4. LEGAL STANDARDS

4.1. Overview

6. I am not an attorney or a legal expert. The legal standards I applied in reaching the conclusions expressed throughout this declaration were provided to me by counsel. In preparing this declaration, I have endeavored to faithfully apply these legal standards. I do not intend to offer opinions on the law. Below, I describe the law I applied in considering whether the claims of the '058 Patent are nonobvious.

4.2. Patent Claims

7. Patent claims describe the invention made by the inventors and describe what the patent owner owns and what the owner may prevent others from doing. Claims may describe products, such as machines or chemical compounds, or processes for making or using a product. Claims are usually divided into parts or steps called limitations.

8. There are two types of claims: independent claims and dependent claims. An independent claim sets forth all the requirements that must be met in

order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers. A dependent claim does not itself recite all of the requirements of the claim but refers to another claim for some of its requirements. In this way, the claim depends on another claim. The law considers a dependent claim to incorporate all of the requirements of the claims to which it refers. The dependent claim then adds its own additional requirements. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claims to which it refers.

9. In that case, the dependent claims incorporate the limitations of the independent claim upon which they depend, and if a reference fails to disclose any of the limitations of an independent claim, the claims which depend on that claim cannot be made invalid by that reference. As a result, any of the references at issue in this proceeding that fail to disclose all of the limitations of an independent claim necessarily also fail to disclose all of the limitations of claims which depend on that claim.

4.3. Burden of Proof for Invalidity

10. I understand that the party challenging the validity of an issued United States patent in an IPR bears the burden of proving invalidity through facts supported by a preponderance of the evidence. I understand that a

“preponderance of the evidence” means evidence sufficient to prove that a fact is more likely true than it is not.

4.4. Claim Construction

11. I understand that the first step in determining validity is to properly construe the claims. I further understand that, in this proceeding, the Board must determine the scope of the claims by using the same claim construction standard that United States District Courts use. Under this standard, words of a claim are given their “ordinary” and “customary” meaning as understood by a person of skill in the art at the time of the invention. I understand that such a person looks to the claims, specification, and file history in understanding the meaning of the claim terms. I have applied this understanding in this declaration. I understand that Allani contends that each term of the Challenged Claims should be interpreted as construed by the court in the district court litigation. Additionally, I understand that Allani contends that the terms (1) “a preliminary search for information or service, locally performed within said communication device” or “a preliminary search locally performed within said communication device” (2) “beforehand locally stored” and (3) “direct access icon” should be construed as proposed in Allani Patent Owner’s Preliminary Response. For the purpose of forming my opinions. I have applied these constructions. I reserve my right to

amend or alter my analysis and opinions in view of the claim constructions adopted by the Board

4.5. Person of Ordinary Skill in the Art

12. I understand that a person having ordinary skill in the art may be defined by factors such as: (a) the levels of education and experience of the inventor and other persons actively involved in the field; (b) the types of problems encountered in the field; (c) prior art solutions to those problems; (d) rapidity with which innovations are made; and (e) the sophistication of the technology.

4.6. Prior Art

13. I understand that a patent cannot be invalidated based on one person's testimony alone without corroborating evidence, particularly documentary evidence. Moreover, I understand that corroboration is required of any witness whose testimony alone is asserted to invalidate a patent, regardless of his or her level of interest in relation to that patent. Accordingly, even if the testifying individual has no interest in the litigation, I understand that that corroboration is still required.

14. In this declaration, I may use the phrase "prior art" when describing specific references. However, my use of this phrase should not be interpreted as agreement that the item(s) described qualify as prior art under the patent laws. I

merely use this phrase to address the items labeled as “prior art” by Petitioner and its expert.

4.7. Anticipation

15. I understand that a patent claim can be found invalid as anticipated if each and every element of the claim, as properly construed, is found either explicitly or inherently in a single prior art reference. However, I also understand that in order to anticipate a patent claim, the reference itself must actually qualify as prior art. If the single prior art reference does not disclose any one claim limitation, then that claim is not anticipated. I further understand that the single prior art reference cannot merely disclose each element; rather, it must disclose all of the elements as arranged in the claim. I have been informed that for a prior art reference to “inherently” disclose something, the reference must necessarily function in accordance with, or include the claimed limitations, to anticipate. The missing descriptive matter cannot merely probably or possibly include the claimed limitations. I further understand that, with respect to an anticipation analysis, it is improper to combine separate, distinct embodiments of a single prior art reference.

16. I understand that for a claim to be anticipated, each claim limitation must be disclosed in a single prior art reference, and the claimed arrangement or combination of those limitations must also be disclosed in that same prior art

reference. I understand that for a reference to be anticipatory, the reference must contain an enabling disclosure. I understand that merely naming or describing the subject matter is insufficient if it cannot be produced without undue experimentation.

4.8. Obviousness

17. I understand that a patent claim can be found invalid as obvious if the differences between the claim and the prior art references would have been obvious to a person of ordinary skill in the art at the time of the invention, taking into account (1) the scope and content of the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the art, and (4) any objective indicia of non-obviousness. I further understand that a claim can be found to be obvious in light of either a single prior art reference or multiple prior art references. I understand that references qualify as prior art for an obviousness determination only when they are analogous to the claimed invention. Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed; and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. However, as I noted above I also understand that in

order to render a patent claim obvious, the reference itself must actually qualify as prior art.

18. To be obvious in light of multiple prior art references, there must be a reason either to combine the two or more prior art references to achieve the claimed invention. I understand that this reason may come from a teaching, suggestion, or motivation to combine or may come from the reference or references themselves, the knowledge or “common sense” of one skilled in the art, or from the nature of the problem to be solved, and may be explicit or implicit from the prior art as a whole. The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.

19. I further understand that there is no suggestion to combine, however, if a reference teaches away from its combination with another source. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant, or if it suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant. If when combined, the references would produce a seemingly inoperative device, then they teach away from their combination. I understand

that it is improper to combine references where the references teach away from their combination.

20. I understand that the degree of teaching away will depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant. I understand that a reference teaches away, for example, if (1) the combination would produce a seemingly inoperative device, or (2) the references leave the impression that the product would not have the property sought by the applicant.

21. I understand that if the teachings of a prior art reference would lead one skilled in the art to make a modification that would render another prior art device inoperable, then such a modification would generally not be obvious. I understand that if a proposed modification would render the prior art device unsatisfactory for its intended purpose, then the proposed modification would generally not be obvious.

22. I understand that it is improper to use hindsight in making the obviousness determination.

23. I understand that some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness must be made. For example, I understand that there may be no rational underpinning to support the

legal conclusion of obviousness where systems are already complete and the party challenging validity seeks to mix and match components, which each exist in the separate systems, from these complete systems.

4.9. Objective Indicia

24. I understand that objective indicia of non-obviousness must be taken into account in a proper obviousness analysis and that these objective indicia of non-obviousness may include the following: (1) failure of others; (2) long-felt but unmet need for the claimed invention; (3) commercial success attributable to the claimed invention; (4) unexpected results of the claimed invention; (5) initial skepticism; (6) prior art teaching away from the claimed invention; (7) professional approval; (8) licensing; (9) acquiescence to the patent's validity; (10) copying of the claimed invention by others, and (11) progress through the Patent Office. I further understand that a so-called nexus between the merits of the claimed invention and evidence of objective indicia of non-obviousness is required in order for the evidence to be given substantial weight in an obviousness determination. As an example, I understand that nexus can be established if there was commercial success and if the invention disclosed in the patent was that which was commercially successful.

5. LEVEL OF ORDINARY SKILL IN THE ART

25. In my opinion, a POSITA at that time would be a person with a bachelor's degree in computer science, computer engineering, or a closely related discipline and two years of relevant professional experience in software engineering or a similar field. Alternatively, someone with an advanced degree and less professional experience or less education and more professional experience would also qualify as a POSITA. For the sake of this declaration I have adopted that level of skill, which I meet. I reserve the right to modify this level of skill at a later date. I understand that Apple has adopted a slightly different definition of a POSITA but I do not believe that the Challenged Claims would be obvious to a POSITA under either parties' definition.

6. THE '058 PATENT

26. The '058 Patent describes a method and device for accessing information sources and services on the web through a communication device. The invention addresses the inefficiencies of prior art navigation systems, particularly for users operating on mobile devices with limited screen size and slow network connections. As the patent states, it aims to provide "a method for accessing information sources and services on the Web that is quicker and easier to use than current methods" ('058 Patent, 1:64–67).

27. The invention achieves this by replacing conventional search-and-click navigation with a locally driven preliminary search using a hierarchical tree of pages called “selection pages.” According to the patent, this involves “one or more steps for displaying a page of selection among a plurality of selection pages organized within a structure of tree menu and beforehand locally stored within said communication device” (’058 Patent, 2:7–11). Each selection page “compris[es] a set of icons” (’058 Patent, 2:11), including “one or more icons for directly accessing remote sources of information and/or one or more selection icons for locally accessing another selection page within said structure of tree menu” (’058 Patent, 2:16–20).

28. Claims 21 and 23 through 26 reflect this architecture and emphasize the structural and functional roles of these pages. Claim 21 requires three locally stored pages arranged in a tree structure. The first page must be “specifically designed” to include a selection icon that locally navigates to a second page. The second page must be “specifically designed” to include both a direct access icon and a second selection icon. The third page must be “specifically designed” to include one or more direct access icons. Additionally, claim 21 requires that “at least one” of the three pages include “at least one icon for directly accessing a portal of Web site and one icon for directly accessing a document provided by said Web site” (’058 Patent, 7:21–39).

29. Claim 23 adds that the locally stored selection pages of claim 21 must be “organized in a tree menu structure” (’058 Patent, 7:53–55). The patent repeatedly emphasizes this structural organization. It teaches that the system allows “a preliminary search for information or service, locally performed within said communication device,” within a plurality of pages that are “organized within a structure of tree menu” and “beforehand locally stored” (’058 Patent, 2:3–10). This tree structure is essential to the invention because it allows the user to progressively refine their navigation across themes and sub-themes without initiating any network communication until a final selection is made.

30. Claim 24 describes the same local multi-page structure from the perspective of a mobile communication device. It requires a first locally stored page that is “specifically designed” to include both a direct access icon and a selection icon. The second locally stored page, reached by the selection icon, must itself be “specifically designed” to include a second direct access icon and a second selection icon. The third page must then include at least a third direct access icon or a third selection icon (’058 Patent, 7:42–8:14).

31. Claim 25 builds upon the previous claims by requiring that one of the locally stored selection pages is “specifically designed to include one or more icons for directly accessing a search engine on the Web” (’058 Patent, 8:15–17). The patent confirms this structure by teaching that the “addresses of information

sources corresponding to direct access icons [are] beforehand locally stored in a table,” including addresses for portals, documents, and search engines (’058 Patent, 2:20–24).

32. Claim 26 requires that when a user selects a direct access icon, the device emits “an address of the first, second or third predetermined one of said remote sources,” and that Claim 26 requires that when a user selects a direct access icon, the device emits “an address of the first, second or third predetermined one of said remote sources” (’058 Patent, 8:18–20). The patent further explains this process earlier in the specification, describing a system that performs “a step for emitting on the communication network, in response to a selection of an icon in a page of selection currently displayed, the address of a source of information corresponding to said selected icon,” and that “said address [is] beforehand locally stored in a table or base of addresses or generated in the progress of the display and selection steps” (’058 Patent, 2:20–24). The patent describes this clearly: upon the selection of a direct access icon, the system performs “a step for emitting on the communication network, in response to a selection of an icon in a page of selection currently displayed, the address of a source of information corresponding to said selected icon,” and that “said address [is] beforehand locally stored in a table” (’058 Patent, 2:20–24).

33. Throughout the specification, the patent emphasizes that all selection pages and the associated icon structures are locally stored before user interaction. The system is not intended to dynamically download or construct these pages at runtime. Instead, the user performs a preliminary search entirely within the locally stored tree structure before emitting any request to the network.

34. These requirements of “beforehand locally stored,” “specifically designed,” and hierarchical tree organization distinguish the claimed invention from the cited prior art. Each page must be deliberately authored to include the specific icon types required by the claims, and must be arranged in a fixed, local structure capable of enabling a standalone preliminary search session..” (‘058 patent, 7:52–64).

35. I understand that the Challenged Patents claim priority to a French patent filed on December 30, 1999 under the number FR 2 803 929 and issued on September 17, 2004 under the number FR 99 16704 and now expired. (EX1001). Accordingly, I understand that the Challenged Claims are entitled to a priority date at least as early as October 12, 1999.

7. CLAIM CONSTRUCTION

36. In construing the terms relevant to these claims, the United States District Court for the Western District of Texas held that the term “direct access

icon” means “an icon that, when selected, causes a request to be sent directly to a web server hosting the website corresponding to the icon,” and that “said address being locally generated” means “said address being generated on the device.” The court also confirmed that the phrase “specifically designed to include” is not indefinite and carries its plain and ordinary meaning (Claim Construction Order, pp. 2—3).

37. These constructions are consistent with the text of the patent and underscore the requirement that icon types, page roles, and local storage conditions are predetermined and structurally implemented prior to user interaction.

8. SUMMARY OF OPINIONS

38. This section presents my opinions on the asserted grounds challenging claims 21 and 23 through 26 of the '058 Patent. For each claim, I analyze whether the cited prior art references, individually or in combination, disclose all limitations of the claim as properly construed. I also consider whether a person of ordinary skill in the art would have been motivated to combine the asserted references in the manner proposed by Petitioner. In my opinion, Petitioner's obviousness theories fail for multiple independent reasons. Most fundamentally, Petitioner's analysis depends on treating text-only navigation elements in Rossmann and Himmel as the claimed “icons.”

39. Dr. Bederson confirms that, for purposes of his opinions in this IPR, he “did not offer [his] own opinion about what the plain and ordinary meaning of the term icon is” and instead “applied patent owner’s interpretation of the term icon.” (Bederson Dep. Tr. 18:19-23; see also id. 116:19-117:6). Dr. Bederson further testifies that Patent Owner’s interpretation is “includes icons that includes only text” and “[does] not require icons to have images.” (Id. 30:12-19.) When asked for the meaning of “icon,” Dr. Bederson testified: “I did not perform an analysis... of what the plain and ordinary meaning is or how a person of skill in the art would have understood it.” (Bederson Dep. Tr. 19:7-13.)

40. Additionally, as explained below, the prior art fails to disclose the required structural and functional arrangements of locally stored selection pages and icon types, and the asserted combinations reflect improper hindsight rather than a reasoned path a skilled artisan would have followed.

8.1. The term “icon”

41. The ’058 Patent distinguishes “designation[s]” from “icon[s]” and “fixed or animated image[s]”: “The choices of a site or of a heading are represented either by a designation or by an icon or a fixed or animated image.” (’058 Patent, 1:23–26.) The ’058 Patent also ties these selectable elements to an “active zone”: “Pointing and clicking by means of a mouse on the corresponding

active zone causes generating by the navigation software a Web address” (Id. 1:26–29.)

42. The ’058 Patent further explains that “[t]he selection icons preferably include an item or thematic title opening an access to a page dedicated to a given activity or theme, and present graphic features that are distinctive” (Id. 2:41–44.) This describes that icons can “include” a thematic title, though some embodiments may not include the thematic title and an icon does not consist of a thematic title alone. The ’058 Patent also emphasizes the visual nature of “icon[s]” in stating: “the shape and the design of these icons... can be fixed or dynamic.” (Id. 5:47–48.) The claims likewise describe the “icons” as including graphical and semi-graphical content: “wherein the icons comprise logotypes, graphic marks or semi-graphic marks.” (Id., claim 19.) The claims also confirm that icons can include text (not just pictures): “wherein the icons comprise textual elements.” (Id., claim 20.)

43. Dr. Bederson’s declaration states that “Patent Owner’s apparent understanding of the plain and ordinary meaning of “icon” must at least include textual icons. I have applied the Patent Owner’s interpretation for my opinions herein.” (Bederson Decl. ¶82.) Dr. Bederson further states that this meaning “also comports with the original disclosures made by the inventor when seeking patent protection for the claimed invention,” pointing to an example from the file

history that “shows selectable icons for specific brand name stores that sell women’s clothing, in particular ‘Gap’, ‘Jean Paul Gaultier’, etc.” (Bederson Decl. ¶85, Ex. 1002 p. 466-479.) Dr. Bederson goes on to assert that “Based on this information, a POSITA would have understood that the claimed “icons” at least include textual elements, like thematic titles.” (Bederson Decl. ¶86.) Consistent with that approach, Dr. Bederson testifies: “That is patent owner's apparent understanding in their infringement allegations, which includes the direct access icon only includes text.” (Bederson Dep. Tr. 24:8-15.)

44. Dr. Bederson points to page elements that indeed include text; however, these page elements further contain graphical features, such as the “GAP” and “Jean Paul Gaultier” icons represented as round ovals while other icons like the “E-Mail” icon are contained in rectangular boxes, which are each distinct graphical elements. In my opinion, in view of the ’058 Patent’s express distinction between “designation[s]” and “icon[s],” and its description of icons as having “shape and ... design” and “graphic features,” a POSITA would not equate a mere line of text (or a textual hyperlink) with the claimed “icon,” even if that line of text is selectable. Dr. Bederson agrees, stating that “Hyperlinks and icons are not the same thing. They're two different words describing different things.” (Bederson Dep. Tr. 83:20-22.)

8.1.1. Rossmann's "menu items" and "choice cards" are text selections, not "icons"

45. Rossmann's interface is expressly text-and-keypad driven: "one or more numerals are keyed in by depressing corresponding numbered buttons in the keypad." (Ex. 1004, 14:12-14.) Rossmann also explains: "A CHOICE card displays a list of choices for the user. The choices are automatically presented in a format Specified on the choice card and generally numbered accordingly. As explained above, the user makes a choice by depressing a key corresponding to the choice." (Id. 9:7-11.) Rossmann also explains that selection can be made by soft keys or numbered keys: "the soft key 'OK' may be pressed, or simply press the numbered button '1'..." (Ex. 1004, 10:35-38.)

46. Consistent with Rossmann's disclosure, Dr. Bederson testifies that "at least one disclosure of Rossmann is to use keys on the key pad to either navigate up and down and pressing okay or pressing a number key." (Bederson Dep. Tr. 107:14-19.) And Dr. Bederson admits that Rossmann's "menu items" he relies upon as "selection icons and direct access icons" "have no graphical element, they're purely text." (Id. 108:13-17.)

47. Dr. Bederson also recognizes that the "icon[s]" disclosed in Rossmann are the separate arrow indicators, testifying that "the second screen display of the

menu would have two icons, one with the upward arrow and another with the downward arrow.” (Bederson Dep. Tr. 102:9–13.)

48. Rossmann further describes devices with extremely limited display and graphics capability where “the memory capacity of mobile computing devices are generally less than 250 kilobytes and their LCD display is perhaps four lines high by twelve or twenty characters and their graphics capabilities are very limited or nearly nonexistent.” (Ex. 1004, 2:17–20.) In my opinion, Rossmann’s text-only, keystroke-selected “menu items” and “choices” are, at most, “designation[s]” under the ’058 Patent’s terminology, not the claimed “icon[s].”

8.1.2. Himmel’s bookmark entries and “hypertext links” are “text string[s],” not “icons”

49. Himmel describes bookmark-based navigation using text strings: “each bookmark entry is comprised of a URL to a favorite page and an associated descriptive text string.” (Ex. 1005, 6:19–22.) Himmel similarly describes its consumer hot list as a text-only menu: “A consumer hot list is composed of a consumer “request’, a text String for display in the user interface which indicates what will happen if the request is Selected and a web “action’, a URL to another web page.” (Id. 19:21-25.)

50. Dr. Bederson acknowledges that, in Himmel, the only place he saw the term “icon” was in a description about password-protected pages that includes:

“Those password protected may be marked by some indicia, e.g., an icon or coloration.” (Bederson Dep. Tr. 116:19-117:6.) Dr. Bederson further testifies that “Himmel’s hyperlinks are icons” when “under patent owner’s apparent understanding of the term icon.” (Bederson Dep. Tr. 115:15-20). He further specifies that this analysis was “[w]here an icon is, an icon as understood by the patent owner, which could be just a textual icon.” (Id. 116:3-5.) In my opinion, Himmel’s “descriptive text string[s]” and “text string” “hypertext links” are not the claimed “icon[s]” under the intrinsic evidence of the ’058 Patent. Dr. Bederson even admitted during his deposition that “Hyperlinks and icons are not the same thing. They’re two different words describing different things.” Dr. Bederson goes on to note that “hyperlinks [describing] a function... relating to the worldwide web and typically navigating web pages... icons by themselves don’t describe that, so they’re not the same thing... that’s a pretty big difference.” (Bederson Dep. Tr. 83:16-84:9).

8.2. Claim 21

51. For claim 21, Petitioner’s mapping of Rossmann’s and Himmel’s text-only navigation elements to the claimed “selection icon[s]” and “direct access icon[s]” depends on the same “textual icon” approach described above. Dr. Bederson, for example, states: “Rossmann discloses “CHOICE” cards that

are specifically designed to include hyperlink icons for selection.” (Bederson Decl. ¶81.)

8.2.1. Rossmann

52. As discussed above, Dr. Bederson admits that the Rossmann “menu items” he relies upon as selection icons “have no graphical element, they’re purely text.” (Bederson Dep. Tr. 108:13-17.) Independently, the Board has already found that Rossmann fails to teach the “beforehand locally stored” requirement. The Board stated that it “agree[s] with Patent Owner that Rossmann does not teach selection pages that are 'beforehand locally stored' for the reasons given by Patent Owner” (Institution Decision, p. 13). It also explained that “Rossmann’s teaching of downloading the new deck of cards shown in Figures 4D–4G occurs after the preliminary search has already begun and therefore does not teach selection pages that are 'beforehand locally stored’” (Institution Decision, p. 13).

53. Dr. Bederson asserts that “Rossmann teaches that the HDML cards (i.e., selection pages) are locally stored within RAM on the mobile device as a deck” (Bederson Decl. ¶123), and that “Rossmann stores screen displays (cards) in a group of one or more screen displays (decks) for local user navigation” (Bederson Decl. ¶73). However, he does not identify any Rossmann disclosure of a three-page hierarchy in which the first page includes only selection icons,

the second includes both selection and direct access icons, and the third includes only direct access icons.

8.2.2. *Himmel*

54. Dr. Bederson similarly relies on a text-only “bookmark” framework in Himmel, stating: “Himmel teaches improved methods for utilizing downloadable locally stored “bookmark sets” to navigate to websites over the Internet.” (Bederson Decl. ¶67.) Dr. Bederson further states that Himmel discloses: “a browser equipped with a bookmark manager and an active bookmark set with the URL addresses the vendor wants to advertise.” (Bederson Decl. ¶68.) But Himmel’s “bookmark set[s]” are comprised of “descriptive text string[s],” and its consumer hot list entries are “text string[s].” (Ex. 1005, 6:19–22; id. 19:21-25.) And Dr. Bederson acknowledges that “Himmel’s hyperlinks are icons” when “under patent owner’s apparent understanding of the term icon.” (Bederson Dep. Tr. 115:15-20).

55. Additionally, there is no indication that Himmel discloses or suggests such a three-level page structure. Himmel’s emphasis is on “bookmark sets” and does not disclose multiple authored pages locally stored in a tree with specific combinations of icons. Dr. Bederson describes Himmel as teaching “improved methods for utilizing downloadable locally stored ‘bookmark sets’ to navigate to websites over the Internet,” including sets that are “pre-downloaded on a vendor

kiosk to access specific vendor addresses” and delivered via “CD-ROM containing a browser equipped with a bookmark manager and an active bookmark set” (Bederson Decl. ¶¶67–68). However, he does not identify any instance in Himmel where such bookmark sets are implemented as pages that are specifically designed with selection and direct access icons in the manner required by the ’058 Patent.

56. The Board found that Patent Owner’s argument that “locally stored” pages must reside in non-volatile memory (such as hard disk or CD-ROM) was too narrow, and determined that Rossmann’s use of RAM to store decks of cards satisfies the “locally stored pages” requirement for purposes of institution (Institution Decision, p. 10). However, even if Himmel’s bookmarks are stored locally, whether in RAM or otherwise, there is no teaching in Himmel of any structure that qualifies as a “selection page” as required by the claim. The bookmarks are not authored or designed to include icons of distinct types nor are they presented as part of a navigable tree structure. Thus, Himmel does not supply the missing claim elements even if its bookmarks could be considered locally stored under the Board’s interpretation.

57. The Board also addressed Patent Owner’s argument that Himmel fails to disclose an icon “for directly accessing a search engine on the Web,” as recited in claim 25 and referenced in claim 21(c). The Board stated that Himmel

describes “a search function for searching within a single website” (Institution Decision, p. 11). Nevertheless, it accepted Petitioner’s position that Himmel’s site-specific search feature teaches the claimed “search engine on the Web” because it enables users to locate information more quickly without navigating through multiple pages (Institution Decision, pp. 11, 14).

58. This interpretation overlooks the claim language and the plain meaning of “search engine on the Web.” The ’058 Patent distinguishes between site-specific search features and a general-purpose web search engine, which permits a user to “control searches on the Web” rather than just within a single domain. The Board’s conclusion that Himmel’s internal search function satisfies this limitation effectively reads the phrase “on the Web” out of the claim. Nothing in Himmel suggests that the search functionality it discloses permits global or cross-site searching, nor does Dr. Bederson identify any such feature in his declaration.

59. Accordingly, even if Himmel’s search icon allows a user to locate content within a vendor’s website, it does not meet the requirement of a direct access icon that initiates a search engine “on the Web.” The Petition offers no evidence that a POSITA would understand a local, domain-limited search function to satisfy the broader functionality required by the claim

8.2.3. *Motivation to Combine*

60. The Petition proposes a combination of Rossmann and Himmel to meet the limitations of claim 21, but provides no persuasive motivation for why a POSITA would have done so in a way that results in a locally stored, three-page hierarchy comprising specific combinations of icon types.

61. In the Institution Decision, the Board accepted Petitioner's position that "adding Himmel's bookmarks to Rossmann's cards provides the benefit of directly accessing a particular web function, thus reducing network traffic and data usage as compared to navigating multiple web pages to arrive at the particular web function" (Institution Decision, p. 10). The Board also noted that "Patent Owner does not address Rossmann's disclosure that a request to a network web page may be unavoidable, and does not address Himmel's disclosure of making a direct request to the desired web page to save time and conserve network resources" (Institution Decision, pp. 9–10).

62. However, this reasoning conflates functional benefits of direct navigation with the actual claim requirements of the '058 Patent. Claim 21 does not merely require that the user can eventually reach a desired web function. It requires that the navigation occur through a series of locally stored, pre-authored selection pages arranged in a tree structure, where each page is "specifically designed" to include precise configurations of selection and direct access icons.

63. Rossmann and Himmel do not disclose or suggest such a structure, either individually or in combination. Rossmann teaches dynamically downloading cards as needed, not preloading a full hierarchy of selection pages. Himmel discusses bookmarks that serve as entry points to web content, but not as part of an authored sequence of selection pages with internal navigation. The claim requirements for progressive navigation, local page transitions, and intentional icon placement across a hierarchy are not addressed in either reference.

64. Furthermore, the Petition's rationale for combining Himmel's bookmarks with Rossmann's card navigation is grounded in hindsight. The references offer no indication that a POSITA would combine a static list of bookmarks with a dynamic deck-based navigation model, let alone do so in a manner that creates a locally stored tree menu with icons, including specific icon arrangements across three pages. In my opinion, this underscores that Petitioner's claim 21 theory depends on importing Himmel's text-string bookmarks/hyperlinks into Rossmann's keypad-driven HDML navigation, even though Himmel's hyperlinks are only "icons" under Patent Owner's "textual icon" interpretation. (Bederson Dep. Tr. 115:15-20.) Instead, Petitioner creates an improper piecemeal combination by selecting features from each system and reconstructs the claimed architecture with the benefit of knowing the invention,

but there is no indication in the references themselves that such a combination would have been contemplated or desirable by a POSITA. The combination requires multiple design changes and assumptions beyond what any of the references individually suggest, and lacks a coherent reason grounded in the prior art itself. Without a clear and supported rationale, grounded in the teachings of Rossmann and Himmel, the asserted combination lacks credibility and cannot support a finding of obviousness.

8.3. Claim 23

8.3.1. Rossmann

65. For the reasons discussed above, Rossmann’s “menu items” are also “purely text” (Bederson Dep. Tr. 108:13-17) and therefore do not disclose the claimed “icon[s].”

66. Additionally, Rossmann’s use of linked cards does not establish a “tree menu structure” as required by the claim. Dr. Bederson writes that “Rossmann’s HDML cards are therefore ‘within a tree menu structure’ such that they are hierarchically linked hypertext pages that are the nodes of tree structure websites” (Bederson Decl. ¶124), but this relies on an abstract understanding of hyperlink structures and does not identify any disclosure that locally stores a pre-authored tree structure on the device.

8.4. Claim 24

8.4.1. *Rossmann*

67. Rossmann’s decks are structured to hold only a subset of pages. As Dr. Bederson acknowledges, “Each card in a deck may contain one or more menu items. The menu items are links to other cards in the deck or to other resources” (Bederson Decl. ¶70). However, there is no disclosure of a deck containing the full multi-page hierarchy required for a preliminary search session as claimed. As discussed in my previous declaration, “Each HDML deck contains only the next navigational step, not the complete multi-level tree required” (Eslamimehr Decl. ¶34). And, as discussed above, the Rossmann “menu items” are “purely text.” (Bederson Dep. Tr. 108:13-17.)

8.4.2. *Motivation to Combine*

68. Petitioner proposes a combination of Rossmann’s deck-based interface, Himmel’s downloadable bookmarks, and Adar’s proxy-based web access to satisfy the limitations of claim 24. As discussed in section 8.1.3, which I incorporate by reference, the Board accepted Petitioner’s argument that incorporating Himmel’s bookmarks into Rossmann’s cards “provides the benefit of directly accessing a particular web function, thus reducing network traffic and data usage as compared to navigating multiple web pages” (Institution Decision, p. 10), and noted that Patent Owner did not address “Rossman’s disclosure that a

request to a network web page may be unavoidable,” or “Himmel’s disclosure of making a direct request to the desired web page to save time and conserve network resources” (Institution Decision, pp. 9–10).

69. However, this reasoning focuses on the general advantages of direct access and fails to address the actual claim requirements. Claim 24 requires a specific structure: at least three locally stored selection pages arranged in a progressive hierarchy, each “specifically designed” to include combinations of selection and direct access icons. None of the references individually discloses this structure, and Petitioner offers no explanation of how a POSITA would be motivated to combine these disparate systems to achieve it. Rossmann provides dynamically fetched decks rather than a fixed local hierarchy. Himmel provides bookmarks, not selection pages with multiple icon types or internal navigation. Adar focuses on server-side mediation and caching, not client-side navigation or UI design.

70. The proposed combination reflects a piecemeal reconstruction of the claimed invention based on hindsight. It requires selecting isolated elements from each reference, repurposing them beyond their original context, and assuming that a POSITA would integrate them into a new architecture not suggested by any of the references. This approach lacks any coherent technical

rationale grounded in the art and does not reflect how a skilled artisan would have approached the problem at the time.

8.5. Claim 25

8.5.1. Rossmann / Himmel / Adar

71. Claim 25 further requires that at least one locally stored page is “specifically designed to include one or more icons for directly accessing a search engine on the Web.” (’058 Patent, claim 25.) As discussed above, Rossmann’s “menu items” are selected by “depressing a key” (Ex. 1004, 9:7-11) and are “purely text.” (Bederson Dep. Tr. 108:13-17.) Himmel’s bookmark entries likewise are “descriptive text string[s]” and its consumer hot list entries are “text string[s].” (Ex. 1005, 6:19–22; id. 19:21-25.)

72. In my opinion, Petitioner has not shown that any asserted combination provides a locally stored page “specifically designed” to include an “icon” for directly accessing a search engine on the web, as required by claim 25. Dr. Bederson states that “Himmel... teaches downloadable bookmark sets that include a ‘consumer hot list’ pulldown menu having links to common web actions for a web site” (Bederson Decl. ¶67), but he does not identify any teaching of a selection page that is specifically designed to include a direct access icon for a search engine on the web.

73. As discussed in section 8.1.2, which I incorporate by reference, the Board acknowledged that Himmel describes “a search function for searching within a single website” (Institution Decision, p. 11), but nevertheless accepted Petitioner’s position that this limited site-specific function satisfies the claim requirement of “directly accessing a search engine on the Web.” The Board reaffirmed this interpretation in its analysis of claim 21, stating it agreed with Petitioner “for the reasons discussed in our analysis of claim 25 above” (Institution Decision, p. 14). This reasoning ignores the plain language of the claims, which require access to a search engine “on the Web,” or a general-purpose web search engine capable of searching across multiple websites, not just within a single domain. Neither the Petition nor Dr. Bederson identifies any disclosure in Himmel that initiates a global search engine. Himmel’s consumer hotlist simply includes labeled bookmarks; it does not transform these into the kind of web search function required by the claims.

74. The Petition further relies on Adar to supply the missing search engine functionality. As summarized by the Board, Petitioner asserts that “Adar teaches this limitation in disclosing a bookmark to a search engine that can be sent to a user” and argues that a POSITA “would have added the bookmark to a search engine taught by Adar to the bookmark manager of Himmel” (Institution Decision, p. 16). The Board concluded that, based on this reasoning, it was

“sufficiently persuaded that the combination of Rossmann, Himmel, King, and Adar teaches this limitation” (Institution Decision, pp. 16–17).

75. However, Adar’s disclosures concern user-supplied bookmark sharing over a proxy, not the design of locally stored, specifically authored selection pages. There is no suggestion in Adar of creating a selection page that includes a direct access icon to a search engine on the Web, nor is there any indication of a three-page locally stored tree structure with structured icon layouts as required by the claims. Petitioner does not explain how a bookmark link in Adar would be implemented within the required architecture. The combination assumes the desired outcome and retrofits unrelated components into the claimed structure without any articulated motivation grounded in the references themselves.

76. In short, even under the Board’s construction, the Petition fails to identify how the asserted combination results in a locally stored selection page specifically designed to include a direct access icon for a general web search engine. The proposal is a piecemeal reconstruction based on hindsight, not a logical integration supported by the disclosures of the cited references.

8.6. Claim 26

8.6.1. Rossmann / Himmel

77. Rossmann explains that a user request is entered by keypad: “one or more numerals are keyed in by depressing corresponding numbered buttons in

the keypad.” (Ex. 1004, 14:12-14.) Dr. Bederson testifies that he “didn’t form a specific opinion” that Rossmann “disclose[s] what the claims refer to as direct access icons on its own.” (Bederson Dep. Tr. 108:21-109:2.)

78. The Board concluded that Rossmann and Himmel disclose the limitations of claim 26 based primarily on its earlier finding for claim 24. Specifically, the Board stated it was “sufficiently persuaded that the decks of cards stored in the RAM of Rossmann teach ‘locally stored pages’ as claimed” and found “a reasonable likelihood that claim 24 would have been obvious over the combination of Rossmann and Himmel” (Institution Decision, p. 10). It then added that “Patent Owner does not challenge Petitioner’s showing with respect to the additional limitations in dependent claim 26” and therefore found “a reasonable likelihood that claim 26 would have been obvious” as well (Institution Decision, pp. 10–11).

79. However, this analysis does not address the distinct and critical limitation in claim 26: the requirement that, in response to a user selection, the device emits “an address of the first, second or third predetermined one of said remote sources” (’058 Patent, 8:18–20), where that address is either “beforehand locally stored in a table” or “locally generated in the progress of the display and selection steps” (’058 Patent, 2:20–24). This requirement is not merely about retrieving an existing URL, but about a selection-driven emission of a specific

address that has been pre-associated with a direct access icon in a predetermined local structure.

80. Rossmann does not disclose such functionality. While Dr. Bederson states that “each of the menu items” in Rossmann “corresponds to a resource locator in the card,” including “an address of the particular object associated with that menu item” such as its “URL,” and that “[t]he address can be ... to a remote object on a server computer” (Bederson Decl. ¶115, citing Rossmann, 10:26–34), he does not identify any mechanism by which Rossmann locally stores or locally generates the final destination address as part of the preliminary selection steps. As the Board noted for claim 24, Rossmann’s cards may be stored in RAM, but they are dynamically downloaded and updated, not pre-authored with the kinds of fixed address associations required by the claim. The system architecture of Rossmann depends on remote fetching of new decks in response to selections, not the emission of locally determined destination addresses.

81. Himmel likewise does not supply this limitation. It teaches bookmark sets that include hyperlinks, but it does not describe those bookmarks as being locally generated during a search or selected from a locally stored table in the manner required by the ’058 Patent. Himmel’s emphasis is on pre-established bookmarks distributed via kiosk or CD-ROM, not on the creation or selection of

web addresses based on local tree navigation. Moreover, Himmel does not disclose how any such selection is converted into an emitted request during the user's interaction with a locally stored page structure.

82. Accordingly, even under the Board's interpretation of "locally stored pages," the Petition fails to show how the references meet the core requirement of claim 26 that a predetermined address, associated with a selected direct access icon, is locally emitted by the device following a local selection. The Petition does not explain how a POSITA would have arrived at such functionality from Rossmann or Himmel, either individually or in combination, and Dr. Bederson offers no technical analysis of how this address selection and emission process is implemented using the architecture disclosed in either reference.

83. For these reasons, the Petition does not demonstrate that the Rossmann–Himmel combination teaches or suggests the specific address emission functionality required by claim 26, and the Board's reliance on the analysis of claim 24 does not substantiate this additional limitation.

8.6.2. Himmel / Adar

84. As discussed above, Himmel's bookmark entries are "descriptive text string[s]" and its consumer hot list entries are "text string[s]." (Ex. 1005, 6:19–22; *id.* 19:21-25.) And Dr. Bederson acknowledges that Himmel's

“hypertext links” are only icons “under patent owner’s apparent understanding of the term icon.” (Bederson Dep. Tr. 115:15-20.)

85. There is no suggestion in Himmel or Adar of local generation of addresses in response to selection of icons. These systems depend on predefined, remotely controlled navigation.

8.6.3. Motivation to Combine

86. Petitioner proposes a four-way combination of Rossmann, Himmel, Adar, and Boyle without articulating how these distinct systems would be integrated into a unified structure meeting all claim limitations. The Petition does not explain how the features scattered across these references would be selected, combined, and implemented to arrive at the claimed invention. The cited references address different problems and operate according to different paradigms. Rossmann involves dynamic fetching of cards, Himmel discusses bookmark sets, Adar is focused on proxy-based web access, and Boyle concerns device-level optimization for internet content. Petitioner fails to identify any common design motivation that would have led a POSITA to integrate these into a cohesive system matching the claimed invention. The proposed combination is a textbook example of a piecemeal reconstruction made with the benefit of hindsight, combining disparate disclosures without any articulated rationale or synergistic interaction. A POSITA would not have been motivated to combine

four distinct systems simply because each includes some loosely related feature. This approach reflects an improper hindsight-driven attempt to reconstruct the invention by cherry-picking features across unrelated references rather than identifying a coherent path a skilled artisan would have pursued at the time.

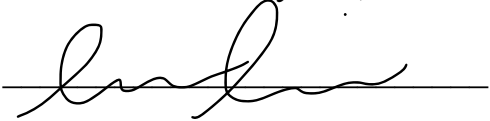
9. CONCLUSION

87. For the reasons above, it is my opinion that claims 21 and 23 through 26 of the '058 Patent are not rendered obvious or anticipated by the cited prior art. The Petition and Bederson fail to account for the graphical requirements of icons, the structural and local-storage requirements of the claims, and does not identify disclosures that teach the claimed combinations of icon functionality across multiple, pre-authored, locally stored pages arranged in a tree menu structure. Furthermore, the Petition does not demonstrate a reasoned motivation to combine the cited references in a manner that would result in the claimed invention. It is my opinion that Petitioner has not met its burden to show that the Challenged Claims 21 and 23 through 26 would have been obvious as of October 12, 1999.

88. I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct, and that all statements made of my own knowledge are true and that all statements made on information

and belief are believed to be true. I understand that willful false statements are punishable by fine or imprisonment or both. See 18 U.S.C. Section 1001.

Dated: February 25th, 2026

A handwritten signature in black ink, appearing to read 'Mahdi Eslamimehr', is written over a horizontal line.

Mahdi Eslamimehr, PhD, MBA