

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

KANNUU PTY LTD.,
Patent Owner.

Case No. IPR2026-00071
U.S. Patent No. 11,573,939

PATENT OWNER'S RESPONSE

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EXHIBIT LIST

No.	Short Name	Exhibit
1001	'252 Patent	U.S. Patent No. 11,200,252
1002	'252 File History	File History of U.S. Patent No. 11,200,252
1003	Madisetti Decl.	Declaration of Vijay Madisetti, Ph.D.
1004	Madisetti CV	Curriculum Vitae of Vijay Madisetti, Ph.D.
1005	<i>Perlman</i>	U.S. Pat. Pub. No. 2002/0113825 A1
1006	<i>Dostie</i>	U.S. Pat. Pub. No. 2004/0021691
1007	<i>Pu</i>	U.S. Patent No. 7,152,213
1008	<i>Lee</i>	U.S. Patent No. 6,144,378
1009	<i>Badarneh</i>	Int'l Patent Pub. No. WO2002/091160
1010	<i>Schroeder</i>	U.S. Patent No. 5,797,098
1011	<i>Strubbe</i>	U.S. Patent No. 5,223,924
1012	<i>Montgomery</i>	U.S. Patent No. 3,309,677
1013	'354 FWD	Final Written Decision, IPR2020-00737, Paper 105 (PTAB Sept. 21, 2021) (filed under seal)
1014	'393 FWD	Final Written Decision, IPR2020-00738, Paper 100 (PTAB Sept. 21, 2021) (filed under seal)
1015	'852 Final Rejection	Final Rejection, Reexamination No. 90/014,760 (July 28, 2022)
1016	'852 PTAB Decision	Decision on Appeal, Reexamination No. 90/014,760 (PTAB Sept. 19, 2023)

No.	Short Name	Exhibit
1017	'579 Final Rejection	Final Rejection, Reexamination No. 90/014,761 (July 28, 2022)
1018	'579 PTAB Decision	Decision on Appeal, Reexamination No. 90/014,761 (PTAB Sept. 19, 2023)
1019	'354/'393 IPR Appeal	Judgment, <i>Kannuu Pty Ltd. v. Samsung Elecs. Am., Inc.</i> , No. 22-1526 (Fed. Cir. Oct. 11, 2013)
1020	'264 Final Rejection	Final Rejection, Reexamination No. 90/014,759 (Sept. 2, 2022)
1021	'264 PTAB Decision	Decision on Appeal, Reexamination No. 90/014,759 (PTAB Sept. 19, 2023)
1022	'939 Patent	U.S. Patent No. 11,573,939
1023		Samsung Document Production SAMSUNG_K_00035577-00035704 (filed under seal)
1024	'939 File History	File History of U.S. Patent No. 11,573,939
1025		Samsung Document Production SAMSUNG_K_00035597 -603 -619 (Original) (filed under seal)
1026		30(b)(6) Deposition Transcript from IPR2020-00737 and IPR2020-00738 (filed under seal)
1027		Samsung's Supplemental Interrogatory Response to Kannuu's Interrogatory in IPR2020-00737 and IPR2020-00738 (filed under seal)
1028		[intentionally omitted]

No.	Short Name	Exhibit
1029		<i>[intentionally omitted]</i>
1030		<i>[intentionally omitted]</i>
1031		<i>[intentionally omitted]</i>
1032		<i>[intentionally omitted]</i>
1033		KAN-PTAB00001830, Kannuu--Revenue 2010-2018.pdf (filed under seal)
1034		KAN-PTAB00001655 (filed under seal)
1035		KAN-PTAB00001505 (filed under seal)
1036		KAN-PTAB00000236 (filed under seal)
1037		KAN-PTAB00000025 (filed under seal)
1038		KAN-PTAB00000910 (filed under seal)
1039		KAN-PTAB00000919 (filed under seal)
1040		KAN-PTAB00000099 (filed under seal)

No.	Short Name	Exhibit
1041		KAN-PTAB00000118 (filed under seal)
1042		KAN-PTAB00000168 (filed under seal)
1043		KAN-PTAB00000973 (filed under seal)
1044		KAN-PTAB00001095 (filed under seal)
1045		KAN-PTAB00001237 (filed under seal)
1046		KAN-PTAB00000386 (filed under seal)
1047		KAN-PTAB00000989 (filed under seal)
1048		KAN-PTAB00001278 (filed under seal)
1049		KAN-PTAB00001327 (filed under seal)
1050		KAN-PTAB00001323 (filed under seal)
1051		KAN-PTAB00001803 (filed under seal)
1052		KAN-PTAB00001515 (filed under seal)

No.	Short Name	Exhibit
1053		KAN-PTAB00001796 (filed under seal)
1054		KAN-PTAB00001056 (filed under seal)
1055		KAN-PTAB00001618 (filed under seal)
1056		KAN-PTAB00001661 (filed under seal)
1057		<i>[intentionally omitted]</i>
1058		SAMSUNG-KANNUU-IPRS-00002 (filed under seal)
1059		SAMSUNG-KANNUU-IPRS-00002(Translation) (filed under seal)

Claim Listing

1[a]	A system for selecting items, the system comprising:
1[b]	an output display of a television;
1[c]	a remote control keypad with an up, down, left, right, select functionality; and
1[d]	a computer processor contained within the television configured to:
1[e]	associate the items with corresponding item identifiers;
1[f]	generate a first display on the output display, the first display comprises a part of an item identifier corresponding to a first set of items and a part of an item identifier corresponding to a second set of items in a database;
1[g]	enable selection, by the remote control keypad, of one of the two parts of the item identifiers associated with a selected set of items;
1[h]	generate, in response to the selection of the one of the two parts of item identifiers, a further display on the output display, the further display comprises an additional part of an item identifier corresponding to a subset of the selected set of items and another additional part of an item identifier corresponding to another subset of the selected set of items;
1[i]	enable selection, by the remote control keypad, of one of the two additional parts of the item identifiers;
1[j]	combine the selected one of the two parts of the item identifiers with the selected one of the two additional parts of the item identifiers to create a larger part of the item identifiers; and
1[k]	display the larger part of the item identifiers on the output display, wherein

1[l]	the additional parts of the item identifiers are shorter than a complete item identifier,
1[m]	the first set of items and the second set of items are mutually exclusive of one another, and
1[n]	the up, down, left, right, select functionality of the remote control keypad enables the selections of parts of item identifiers specifically positioned in a circular menu on the output display.

I. INTRODUCTION

The Board should confirm the patentability of claim 1 (the “Challenged Claim”) of U.S. Patent No. 11,573,939 (the “’939 patent”). Petitioner bears the burden of proving unpatentability by a preponderance of the evidence, 35 U.S.C. § 316(e), and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). None of the Petition’s five grounds carries that burden.

First, no asserted reference discloses limitation 1[n] — that “the up, down, left, right, select functionality of the remote control keypad enables the selections of parts of item identifiers specifically positioned in a circular menu on the output display.” Perlman’s remote does not navigate to and then select displayed parts of item identifiers; each press of a character-mapped button directly *enters* a character. The Petition concedes as much: it argues in the alternative that “[t]o the extent PO argues that this limitation requires the use of buttons with directional functionality to select the individual characters, a POSITA would have found it obvious” to redesign Perlman. Pet. 35. That fallback fails because the proposed redesign would abandon Perlman’s core operating principle and re-introduce the very cursor-and-scroll selection that Perlman disparages as the failed prior art.

Badarneh fares no better: its rotary-switch pressure points likewise directly enter characters, and its “select” point performs unrelated functions such as “home” and “back.”

Second, no reference discloses limitations 1[f] and 1[m], properly construed. The claim requires parts of item identifiers corresponding to a “first set of items” and a “second set of items in a database,” where those sets “are mutually exclusive of one another.” The claimed sets are partitions of the database itself — not transient groupings created on the fly by filtering a single content list by letter prefix. The Petition recognizes this vulnerability, hedging that “[s]hould the Board construe elements 1f and 1m as requiring tree-structured databases or separate databases, Dostie and Josenhans disclose them[.]” Pet. 17. But the proposed combinations supply no reason, other than hindsight, to restructure Perlman's or Badarneh's single-list architecture — and in any event no combination cures the missing navigate-and-select functionality of limitation 1[n].

Third, Badarneh does not disclose “an output display of a television” (1[b]) or “a computer processor contained within the television” (1[d]). Badarneh describes handheld devices with integrated screens; the Petition reaches a television only by stacking inference upon inference.

Fourth, all four of Petitioner's asserted prior art references in this IPR were presented to the Office during examination of the '939 patent.¹ Ex. 1001 (citing all four references – Perlman, Dostie, Josenhans, and Badarneh). Three out of four of these primary references that Petitioner asserts to invalidate the '939 patent were specifically considered by the examiner in the determination of allowance. The only reference not discussed specifically by the Examiner is Badarneh. However, this reference was made known to the Examiner prior to the Examiner's Non-Final Rejection of March 15, 2022, and was thus known to the Examiner prior to their knowing non-use of Badarneh for a Non-Final Rejection. Badarneh was similarly not considered significant enough to discuss in the Examiner's Notice of Allowance.

Finally, the objective indicia of non-obviousness confirm patentability. The Board previously discounted this evidence for want of nexus to the *then-challenged* claims. The Challenged Claim now expressly recites the very characteristics to which the evidence is directed — selection of parts of item

¹ The references asserted in Petitioner's Petition are U.S. Pat. Pub. No. 2002/0113825 A1 ("Perlman"); U.S. Pat. Pub. No. 2004/0021691 ("Dostie"); U.S. Pat. Pub. No. 2002/0078013 ("Josenhans"); Int'l Pat. Pub. No. WO2002/091160 ("Badarneh"). Petitioner also lists four additional references (U.S. Pat. No. 7,152,213 ("Pu"); U.S. Pat. No. 5,797,098 ("Schroeder"); U.S. Pat. No. 5,223,924 ("Strubbe"); U.S. Pat. No. 3,309,677 ("Montgomery")), in its petition but does not assert them in its arguments. Exs. 1005-1012.

identifiers positioned in a circular menu on a television, using the up, down, left, right, select functionality of a remote control keypad. The nexus deficiencies the Board identified in 2021 are cured by the claim language itself.

II. BACKGROUND

A. The '939 Patent and the Challenged Claim

The '939 patent is directed to a system for selecting items — for example, movie or program titles — on a television, using a standard remote control. As claimed, parts of item identifiers (such as letters of a title) are presented “specifically positioned in a circular menu” on the television’s display, and the “up, down, left, right, select functionality” of the remote control keypad “enables the selections” of those parts. EX1001, claim 1. The user’s successive selections are combined to build a larger part of an item identifier, progressively narrowing mutually exclusive sets of items in a database. *Id.*

The Challenged Claim was deliberately drafted, with the benefit of the full record of the prior proceedings between these parties, to recite a specific combination absent from the art of record. The comparison below illustrates the additions relative to claim 12 of the '579 patent (initial submission in single underline in the filed version; amendment during prosecution in bold).

'939 Patent, Claim 1	'579 Patent, Claim 12
1. A system for selecting items, the system comprising: an output display <u>of a television</u>; a remote control keypad <u>with an up, down, left, right, select functionality</u>; and a computer processor <u>contained within the television</u> configured to: associate the items with corresponding item identifiers; generate a first display on the output display, the first display comprises a part of an item identifier corresponding to a first set of items and a part of an item identifier corresponding to a second set of items in a database; enable selection, by the remote control keypad, of one of the two parts of the item identifiers associated with a selected set of items; generate, in response to the selection of the one of the two parts of item identifiers, a further display on the output display, the further display comprises	12. An apparatus for selecting items, the apparatus comprising: an output display; an input; and a computer processor configured to execute a method comprising: associating the items with a corresponding item identifiers; generating a first display on the output display, the first display comprises: a part of an item identifier corresponding to a first set of items and a part of an item identifier corresponding to a second set of items in a database; enabling selection of one of the two parts of the item identifiers by a user using the input; generating, in response to the selection of the one of the two parts of item identifiers, a further display on the output display, the further display comprises:

an additional part of an item identifier corresponding to a subset of the selected set of items and another additional part of an item identifier corresponding to another subset of the selected set of items; enable selection, by the remote control keypad, of one of the two additional parts of the item identifiers; combine the selected one of the two parts of the item identifiers with the selected one of the two additional parts of the item identifiers to create a larger part of the item identifiers; and display the larger part of the item identifiers on the output display, wherein the additional parts of the item identifiers are shorter than a complete item identifier, the first set of items and the second set of items are mutually exclusive of one another, and <u>the up, down, left, right, select functionality of the remote control keypad enables the selections of parts of item identifiers specifically positioned in a circular menu on the output display.</u>	an additional part of an item identifier corresponding to a subset of the selected set of items and another additional part of an item identifier corresponding to another subset of the selected set of items; enabling selection of one of the two additional parts of the item identifiers by the user using the input; combining the selected one of the two parts of the item identifiers with the selected one of the two additional parts of the item identifiers to create a larger part of the item identifiers; and displaying the larger part of the item identifiers on the output display; wherein the additional parts of the item identifiers are shorter than complete item identifiers; and the first set of items and the second set of items are mutually exclusive of one another.
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B. Prosecution History

All four references asserted in the Petition — Perlman, Dostie, Josenhans, and Badarneh — were before the Office during examination of the '939 patent, together with the complete records of the prior *inter partes* reviews and Petitioner's *ex parte* reexamination requests concerning the related patents. EX1002, 150, 230-89. The Examiner discussed Perlman, Dostie, and Josenhans at length in multiple Office Actions, EX1002, 508-23, and found in the first Office Action that then-claim 55 — now the Challenged Claim — “was allowable” over that art. *Id.* at 521. The Challenged Claim was never subject to any prior-art rejection; the Examiner applied Perlman only against other, later-cancelled claims. The Examiner thereafter allowed the Challenged Claim twice more — after the Final Written Decisions in IPR2020-00737 and -00738 were of record, and after Petitioner's reexamination requests were of record. EX1002, 150.

III. LEGAL STANDARDS

Petitioner bears the burden of proving unpatentability by a preponderance of the evidence, and that burden of persuasion never shifts to the Patent Owner. 35 U.S.C. § 316(e); *Dynamic Drinkware*, 800 F.3d at 1378. An obviousness determination requires consideration of all four *Graham* factors, including objective indicia of non-obviousness, which “must be considered in every case

where present.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc).

IV. CLAIM CONSTRUCTION

Two limitations require construction here. Patent Owner does not believe any other term requires express construction for purposes of this proceeding.

A. “A First Set of Items” / “A Second Set of Items in a Database” That “Are Mutually Exclusive of One Another” (Limitations 1[f], 1[m])

Limitation 1[f] requires a first display comprising “a part of an item identifier corresponding to a first set of items and a part of an item identifier corresponding to a second set of items in a database,” and limitation 1[m] requires that “the first set of items and the second set of items are mutually exclusive of one another.” Properly construed, the “first set” and “second set” are mutually exclusive sets of items *in the database* — that is, the items are organized in the database into non-overlapping sets to which the displayed parts of item identifiers correspond — not ad hoc groupings that exist only as the transient result of filtering a single, undifferentiated content list by whatever prefix a user has typed.

The claim language compels this reading. The sets are sets “in a database” — the phrase modifies where the sets exist, not merely where the items come from. And limitation 1[m] states, in the present tense and as a standing property of the system, that the sets “are mutually exclusive of one another.” The specification

confirms that the invention operates on items organized for retrieval — pre-processed and indexed such that each selectable part of an item identifier corresponds to a distinct, non-overlapping collection of items. EX1001.

Petitioner's own Petition acknowledges that this is the natural reading of the claim: it includes Grounds 2 and 3 precisely because, “[s]hould the Board construe elements 1f and 1m as requiring tree-structured databases or separate databases, Dostie and Josenhans disclose them[.]” Pet. 17. Petitioner thus concedes that Perlman and Badarneh, standing alone, are exposed on this limitation; the dispute is whether the claim means what it says. It does.

B. “The Up, Down, Left, Right, Select Functionality of the Remote Control Keypad Enables the Selections of Parts of Item Identifiers Specifically Positioned in a Circular Menu on the Output Display” (Limitation 1[n])

Limitation 1[n] requires that the recited *combination* of functionalities — up, down, left, right, *and select* — “enables the selections” of parts of item identifiers that are “specifically positioned in a circular menu” on the display. Properly construed, this limitation requires that the directional functionality of the keypad be used to navigate among the parts of item identifiers positioned in the circular menu according to their positions, and that the select functionality be used to select the navigated-to part. It excludes arrangements in which each keypress directly

enters a character — i.e., arrangements in which there is no navigation and the “select” function plays no role in selecting parts of item identifiers.

The claim language supports this construction in three ways. *First*, the claim recites five functionalities — four directional and one “select” — and provides that this “functionality ... enables the selections.” A system in which the select function never participates in selecting parts of item identifiers does not use the recited functionality to enable the selections; it reads “select” out of the claim. *Second*, the parts of item identifiers are “specifically positioned” in the menu — language that matters only if position governs how the directional keys operate on the displayed parts. *Third*, the specification describes presenting the user “with 4 strings in a circular menu indicating the strings are selected by movements of the joystick in the directions left, right, up and down,” EX1001, 4:56-64 — movement-based interaction with positioned options, followed by selection.

Petitioner's anticipated rejoinder — that the prior IPRs construed similar language more broadly — fails on the claim language. The claims previously before the Board recited that portions of item identifiers were “displayed in a position corresponding to an up, down, left, right, select functionality,” EX1014, 20-21 — positional language about where things appear on screen. Limitation 1[n] is operational: the functionality “enables the selections” of parts “specifically positioned in a circular menu.” Different words carry different scope, and a

detailed explanation grounded in this different language is exactly what the Board's consistency obligations contemplate.

V. GROUND 1 FAILS: PERLMAN NEITHER ANTICIPATES NOR RENDERS OBVIOUS THE CHALLENGED CLAIM

A. Perlman Does Not Disclose Limitation 1[n]

1. Perlman's buttons directly enter characters; they do not navigate to and select parts of item identifiers positioned in a circular menu

Perlman's system is built on "character-mapped buttons": the graphical interface displays characters in a "star" configuration mirroring the physical button layout of the remote, and "[a]s the user selects letters via the displayed character-mapped buttons 110, the user's letter selections will appear in a text box 130."

EX1005, ¶¶[0014], [0017]. Pressing a button *enters* the character mapped to it.

There is no navigation among the displayed parts, no cursor, no focus, and no confirmation step. Perlman's separate "'select' button 108" exists "for making various types of data selections," *id.*, ¶[0014] — but Petitioner identifies no disclosure that button 108 plays any role in selecting the displayed characters, because it does not: the character-mapped buttons do that directly and completely.

The Petition's own mapping confirms the gap. Petitioner argues that "the 'left' button on the remote has a 'left' functionality because it will select the character in the 'left' direction ('B' in Fig. 2) when pressed." Pet. 34. That is a description of direct entry — one press, one character — not of the claimed

functionality in which the up, down, left, right, *select* functionality collectively “enables the selections” of parts positioned in a circular menu. Under the correct construction (§ IV.B), Perlman does not disclose limitation 1[n], and anticipation fails.

2. The Petition's alternative obviousness theory concedes the gap and cannot fill it

Anticipating this problem, the Petition pivots: “To the extent PO argues that this limitation requires the use of buttons with directional functionality to select the individual characters, a POSITA would have found it obvious to combine Perlman's disclosure of ‘directional ... buttons’ with the selection of characters,” proposing that a POSITA would redesign Perlman by “displaying the available letters with a selection cursor and allowing the directional buttons to control the placement of the cursor.” Pet. 35-36. This alternative theory fails for at least three reasons.

First, the theory contradicts Perlman's own teachings. The sole disclosure Petitioner cites for directional character selection is Perlman's description of the *prior art* — “scrolling through the alphabet (e.g., via scroll up/down buttons)” — which Perlman identifies as the deficient approach its invention exists to replace. EX1005, ¶[0004]. A reference “teaches away” when it criticizes, discredits, or

discourages the proposed path, and Perlman does exactly that with respect to navigation-based selection.

Second, the proposed redesign changes Perlman's principle of operation. Perlman's stated objective is to let the user "rapidly enter alphanumeric characters ... without looking away from the television/computer screen," EX1005, ¶[0014], achieved through one-press-per-character entry on character-mapped buttons. Replacing that with cursor navigation multiplies the keystrokes per character and reintroduces the very inefficiency Perlman set out to eliminate. A modification that would require a change in the basic principle under which the reference operates does not support obviousness.

Third, the theory is hindsight: it uses the Challenged Claim as a blueprint to rebuild Perlman into something Perlman never was, on the strength of a generalized assertion that the result "would be more natural and efficient." Pet. 36. Conclusory efficiency rationales of this kind cannot substitute for an articulated, evidence-based reason to modify.

B. Perlman Does Not Disclose Limitations 1[f] and 1[m]

Under the correct construction (§ IV.A), Perlman also fails limitations 1[f] and 1[m]. Perlman operates on a single "database list 120" of available content. EX1005, ¶[0017]. Petitioner's primary theory is that the groups of titles beginning with a given letter (e.g., titles beginning with "A" versus titles beginning with "B")

constitute the claimed mutually exclusive first and second “sets of items in a database.” Pet. 23, 33. But those groupings are not sets *in the database* at all; they are momentary artifacts of filtering one list by the prefix displayed at a given instant. Nothing in Perlman discloses that the database organizes, stores, or maintains items in mutually exclusive sets to which the displayed parts correspond.

Petitioner's alternative theory — that Perlman's references to different content types (television program content, multimedia files, MP3 music) supply the mutually exclusive sets, Pet. 24 — fares no better. Those disclosures appear in different embodiments directed to searching different databases, and Petitioner concedes it must resort to obviousness to stitch them together into a single system that searches multiple content types “for a single search string.” Pet. 24-25. The Petition offers only the generic assertion that combining them “would provide additional, desirable functionality.” *Id.* That is not a reason a POSITA would have reconfigured Perlman's single-list system into one presenting parts of item identifiers corresponding to mutually exclusive database sets; it is hindsight reconstruction.

Because Perlman fails to disclose or render obvious at least limitations 1[f], 1[m], and 1[n], Ground 1 fails as to the Challenged Claim.

VI. GROUND 2 FAILS: PERLMAN AND DOSTIE DO NOT RENDER THE CHALLENGED CLAIM OBVIOUS

Ground 2 adds Dostie solely as a hedge on limitations 1[f] and 1[m] — to supply the “tree-structured” or hierarchical database organization Perlman lacks. Pet. 17, 38-43. It fails for two independent reasons.

First, Dostie does nothing to cure limitation 1[n]. Dostie is directed to hierarchical dictionary trees for locating completion candidates. It supplies no remote control keypad whose up, down, left, right, select functionality navigates to and selects parts of item identifiers positioned in a circular menu. The 1[n] gap identified in § V.A therefore persists in the combination, and Ground 2 fails for that reason alone.

Second, the Petition's reason to combine — that hierarchical trees were “well known,” that Dostie provides “express motivation” to “rapidly predict potential completion candidates,” and that its trees would have been “a trivial and routine addition” to Perlman yielding “predictable results,” Pet. 41-42 — does not withstand scrutiny. Perlman's system already accomplishes its stated purpose with a flat, prioritized list; the Petition identifies no problem in Perlman that Dostie's restructuring solves, and no reason — beyond the claim itself — that a POSITA would have re-architected Perlman's database.

VII. GROUND 3 FAILS: PERLMAN, DOSTIE, AND JOSENHANS DO NOT RENDER THE CHALLENGED CLAIM OBVIOUS

Ground 3 adds Josenhans — a reference directed to search tables for multiple connected databases — as a further hedge on the database limitations. Pet. 44-47. It fails for the same reasons as Ground 2: nothing in Josenhans supplies the navigate-and-select functionality of limitation 1[n], so the dispositive gap remains; and the Petition's stacked, generic efficiency rationales for the three-way combination, Pet. 45-46, do not amount to the articulated reasoning required. Notably, Josenhans discloses a search table “for each connected database” — an open-ended plurality — and the Petition never explains how or why the combined system would present exactly the claimed arrangement of parts of item identifiers corresponding to mutually exclusive sets, selectable through a circular menu by directional navigation and selection.

VIII. GROUND 4 FAILS: BADARNEH NEITHER ANTICIPATES NOR RENDERS OBVIOUS THE CHALLENGED CLAIM

A. Badarneh Does Not Disclose “An Output Display of a Television” (1[b]) or “A Computer Processor Contained Within the Television” (1[d])

Badarneh is a handheld-device reference. It describes text-entry systems for “screen-assisted and screen-based devices” — devices that carry their own displays — operated by a rotatable multifunctional switch on the device itself. EX1009, 1:27-30; 16:23-30. The word “television” appears nowhere in Petitioner's citations.

The passage Petitioner stretches furthest — that the system is “adaptable to larger display screens ... used ... for other apparatus[es],” such as “remote control units,” EX1009, 4:6-11 — describes the *unit itself* having the larger screen. A “remote control unit” with its own display is not “an output display of a television.”

The Petition bridges the gap only with expert say-so stacked two inferences deep: first, that a POSITA “would understand” the screen-based devices to “include[] a television with a remote control device,” Pet. 52; and second — for limitation 1[d] — that in such an imagined embodiment “the processor would be within the television,” Pet. 57-58. Badarneh actually places the processor in the handheld apparatus. EX1009, 12:26-29; 16:14-21. Neither inference is disclosure, and anticipation cannot rest on what a reference “would” have been if rebuilt. Nor does the Petition’s one-sentence obviousness patch — that televisions “were well-known,” Pet. 52 — explain why a POSITA would have transplanted Badarneh’s integrated, rotary-switch-operated handheld architecture into a two-device television-remote system, or how, or with what expectation of success.

B. Badarneh Does Not Disclose Limitations 1[c] and 1[n]

Badarneh’s input device is “a rotatable, multifunctional switch” with “five pressure points indicated by I, II, III, IV and V.” EX1009, 16:23-30. The Petition equivocates about what those points are — asserting that “positions I, II, III, and IV respectively correspond to up, left, down, and right functionality, *as well as*

selection functionality, and position V corresponds to a selection functionality, since it can select various options like ‘home’ and ‘back.’” Pet. 56 (emphasis added). The equivocation is the point: in Badarneh, pressing a directional pressure point directly *enters* the character or option displayed at that position — direction and “selection” are the same press — and the “fifth” point performs housekeeping functions (“home,” “back”), not selection of parts of item identifiers. As with Perlman, that is direct entry, not the claimed arrangement in which the up, down, left, right, select functionality of a *remote control keypad* “enables the selections” of parts “specifically positioned in a circular menu.” Under the correct construction (§ IV.B), limitation 1[n] is absent; and a rotary switch on a handheld device is in any event not “a remote control keypad” as recited in limitation 1[c].

The Petition’s fallback — Badarneh’s “traditional pushbutton keyboard” of Figures 12a-12b, whose “#,” “*,” and “OK” keys bear arrows, Pet. 56 — underscores the problem. A twelve-key telephone pad on which assorted keys are decorated with arrows is not a keypad with “up, down, left, right, select functionality” that navigates a circular menu; the Petition does not even attempt to show those keys performing the claimed navigate-and-select operation on parts of item identifiers.

C. Badarneh Does Not Disclose Limitations 1[f] and 1[m]

Badarneh's predictive display draws candidate letters and words from a single lexicon "according to priority of use/probability calculus." EX1009, 15:17-19. As with Perlman, the momentary groupings of candidates associated with each displayed option are not mutually exclusive "sets of items in a database" under the correct construction (§ IV.A); they are outputs of a probability ranking over one corpus. The Petition's contrary mapping, Pet. 57-60, never identifies any disclosed database organization at all.

IX. GROUND 5 FAILS: BADARNEH AND JOSENHANS DO NOT RENDER THE CHALLENGED CLAIM OBVIOUS

Ground 5 adds Josenhans to Badarneh for the same database-structure hedge, Pet. 72-74, and fails for the reasons already given: Josenhans supplies neither a television (§ VIII.A) nor the navigate-and-select functionality of limitation 1n (§§ IV.B, VIII.B), so the dispositive gaps persist; and the Petition's motivation — the efficiency of "searching multiple databases as simply as searching one database," Pet. 74-75 — is the same generic rationale the Central Reexamination Unit ("CRU") recited for different claims lacking these limitations, not a reason to build the claimed combination.

X. OBJECTIVE INDICIA CONFIRM THE NON-OBVIOUSNESS OF THE CHALLENGED CLAIM

A. The Prior Findings Do Not Control Because the Claimed Invention Has Changed

Objective indicia “must be considered in every case where present.” *Apple*, 839 F.3d at 1048. The Petition urges the Board simply to re-adopt its findings from IPR2020-00737 and -00738, where the Board gave the objective evidence “little weight” for want of nexus. Pet. 75-80. But the Board’s stated reasons in those proceedings were specific to the *claims then at issue*: Patent Owner had “fail[ed] to sufficiently link the praise and industry recognition to any unique characteristics of the invention” of those claims, had “not shown that Petitioner’s product ... embodies, or is similar to, the product” of those claims, and had not tied commercial success or unexpected results “to the specific features of the claims at issue.” Pet. 78-79 (quoting EX1013, 92-94).

Nexus is always evaluated against the claim. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373-74 (Fed. Cir. 2019). The Challenged Claim is not the claim the Board evaluated in 2021. It now expressly recites the characteristics to which the objective evidence has always been directed: a *television*; a *remote control keypad with up, down, left, right, select functionality*; and that functionality *enabling the selections of parts of item identifiers specifically positioned in a circular menu* on the television’s display. The linkage the Board found missing is

now supplied by the claim language itself. Patent Owner accordingly relies on *actual* nexus to these recited features — not on a presumption of nexus — and respectfully submits that the 2021 findings, made as to different claims under different constructions, cannot be mechanically imported here.

B. The Evidence of Record

The relevant evidence is already of record in this proceeding — filed by Petitioner itself as EX1023, EX1025-EX1027, and EX1033-EX1056 (under seal). Patent Owner cites Petitioner's exhibits below and will move to seal any paper quoting sealed material.

1. Industry praise by Petitioner itself

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2. Copying

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3. Commercial success, industry recognition, and failure of others

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C. Weight

Even standing alone, contemporaneous internal praise and adoption by the market-leading television maker — directed to the very combination of features the Challenged Claim recites — is powerful evidence that the claimed invention was not obvious to those most skilled and most motivated in this field. Considered together with the failures of Petitioner's grounds on the merits, the objective evidence confirms that Petitioner has not carried its burden.

XI. CONCLUSION

For the foregoing reasons, Petitioner has failed to prove by a preponderance of the evidence that the Challenged Claim is unpatentable. The Board should confirm the patentability of claim 1 of the '939 patent.

Dated: July 22, 2026

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24, the undersigned hereby certifies that the word count for the foregoing **PATENT OWNER'S RESPONSE** (excluding the table of contents, table of authorities, mandatory notices, certificate of service or word count, and appendix of exhibits or claim listing) totals 4,915 words, which is less than the 14,000 words allowed under 37 C.F.R. § 42.24(b)(2).

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CERTIFICATE OF SERVICE

I certify that the foregoing **PATENT OWNER'S RESPONSE** was served on July 22, 2026, on the Petitioner by filing this document through the Patent Trial and Appeal Board P-TACTS System as well as e-mailing a copy to qc-samsung-kannuu@quinnemanuel.com.

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