

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION and MICROSOFT MOBILE, INC.,
Petitioner,

v.

GLOBAL TOUCH SOLUTIONS, LLC,
Patent Owner.

Case IPR2015-01148
Patent 7,498,749

PETITIONER'S DEMONSTRATIVE EXHIBITS FOR ORAL ARGUMENT

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MICROSOFT CORPORATION and MICROSOFT MOBILE, INC.,
Petitioner

v.

GLOBAL TOUCH SOLUTIONS, LLC,
Patent Owner

Case IPR2015-01147 / Patent 7,994,726
Case IPR2015-01148 / Patent 7,498,749
Case IPR2015-01149 / Patent 7,329,970
Case IPR2015-01150 / Patent 7,781,980
Case IPR2015-01151 / Patent 8,288,952

PETITIONER'S DEMONSTRATIVE EXHIBITS

Outline

- I. Overview of Obviousness (Jahagirdar + Schultz) and Patent Owner Arguments
- II. Patent Owner Arguments Affecting All Patents
- III. Patent Owner Arguments Affecting Particular Patents

Outline

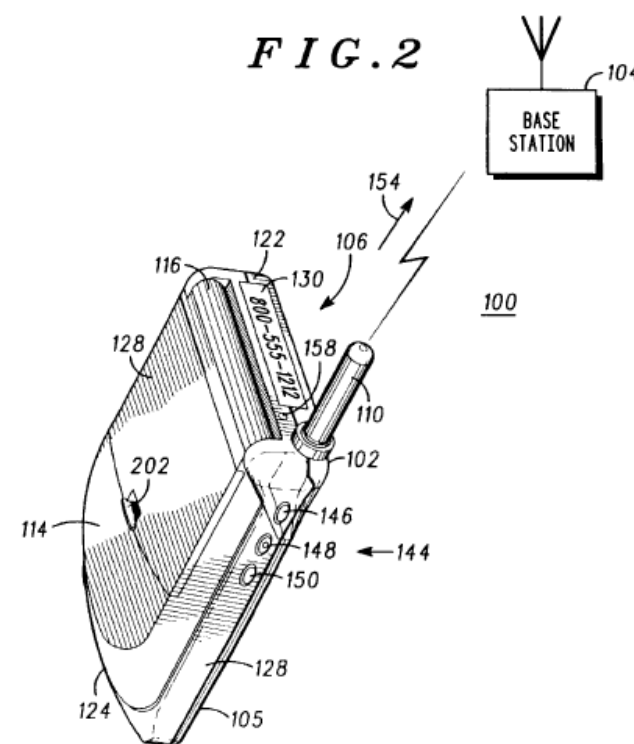
- I. Overview of Obviousness (Jahagirdar + Schultz) and Patent Owner Arguments
- II. Patent Owner Arguments Affecting All Patents
- III. Patent Owner Arguments Affecting Particular Patents

Overview – Challenged Claims

- Case IPR2015-01147 / Patent 7,994,726
 - Claims 1, 3-10, 19-21, 25-30
- Case IPR2015-01148 / Patent 7,498,749
 - Claims 1, 2, 5-7, 14, 15, 21, 23
- Case IPR2015-01149 / Patent 7,329,970
 - Claims 1, 3-5, 10-14, 19, 48, 49, 51, 52
- Case IPR2015-01150 / Patent 7,781,980
 - Claims 1, 3-5, 32
- Case IPR2015-01151 / Patent 8,288,952
 - Claims 1-4, 14, 16, 17, 19, 22-24, 26, 27, 38-40

Overview – Obviousness (Jahagirdar + Schultz)

1. A method for controlling a product comprising a power source, or a connection for a power source, and an energy consuming load, said method including the step of providing an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of a user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.



E.g., IPR2015-01147, Exhibit 1001 ('726 Patent) at 12:28-36

E.g., IPR2015-01147, Exhibit 1004 (Jahagirdar) Figs. 1-2, 5

PO Arguments Involving All Patents

1. Whether Jahagirdar would have been modified to include a touch sensor
2. Whether Jahagirdar's keys 144 activated first display 516

1. IPR2015-01147, Paper 15 (Petitioner's Reply), pp. 1-10; IPR2015-01148, Paper 20 (Petitioner's Reply), pp. 1-8; IPR2015-01149, Paper 20 (Petitioner's Reply), pp. 4-11; IPR2015-01150, Paper 16 (Petitioner's Reply), pp. 1-10; IPR2015-01151, Paper 16 (Petitioner's Reply), pp. 1-10

2. IPR2015-01147, Paper 15 (Petitioner's Reply), pp. 11-16; IPR2015-01148, Paper 20 (Petitioner's Reply), pp. 8-13; IPR2015-01149, Paper 20 (Petitioner's Reply), pp. 11-17; IPR2015-01150, Paper 16 (Petitioner's Reply), pp. 11-14; IPR2015-01151, Paper 16 (Petitioner's Reply), pp. 11-15

NOTE: Claim 1 of the '970 patent does not require the "activation" Patent Owner contends Jahagirdar lacks

No Additional PO
Arguments Specific to
'749 & '980 Patents

PO Arguments Specific to '726 Patent

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)
4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated” ('726 Claims 5-10)

3. IPR2015-01147, Paper 15 (Petitioner's Reply) at pp. 17-19

4. *Id.* at p. 19

PO Arguments Specific to '970 Patent

5. Whether Jahagirdar taught a “luminous visible location indicator” ('970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)
6. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

5. IPR2015-01149, Paper 20 (Petitioner's Reply) at pp. 1-3

6. *Id.* at p. 17

PO Arguments Specific to '952 Patent

7. Whether Jahagirdar disclosed automatic deactivation of its visible indication ('952 Claim 23)

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PO Arguments Involving All Patents

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2. IPR2015-01147, Paper 15 (Petitioner's Reply), pp. 11-16; IPR2015-01148, Paper 20 (Petitioner's Reply), pp. 8-13; IPR2015-01149, Paper 20 (Petitioner's Reply), pp. 11-17; IPR2015-01150, Paper 16 (Petitioner's Reply), pp. 11-14; IPR2015-01151, Paper 16 (Petitioner's Reply), pp. 11-15

NOTE: Claim 1 of the '970 patent does not require the "activation" Patent Owner contends Jahagirdar lacks



Supreme Court

[W]hen a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 417 (2007) (internal citations omitted).

[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id.

550 U.S. 398 KSR INTERN. CO. v. TELEFLEX INC. 1727
Cite as 127 S.Ct. 1727 (2007)

[1] 1. This Court's Rules expressly provide for extensions of time in which to file a petition for writ of certiorari, Rule 13.5, or a petition for rehearing of "judgment or decision . . . on the merits," Rule 44.1, but they do not provide for any extension of time in which to file a petition for rehearing of an order denying certiorari. Such an order is plainly not a "judgment or decision . . . on the merits." Indeed, while Rule 44.1 establishes a 25-day period for filing a petition for rehearing of a judgment on the merits "unless the Court or a Justice shortens or extends the time," Rule 44.2, articulating a 25-day period for filing a petition for rehearing of an order denying certiorari, contains no such exception, confirming that the Rules do not contemplate granting an extension for such petitions.

[2,3] 2. An order denying certiorari "will not be suspended pending disposition of a petition for rehearing except by order of the Court or a Justice." Rule 16.3. This most extraordinary relief will not be granted unless there is a "reasonable likelihood of this Court's reversing its previous decision and granting certiorari." *Richmond v. Arizona*, 434 U.S. 1269, 98 S.Ct. 8, 54 L.Ed.2d 34 (1977) (Rehnquist, J., in chambers). In arguing for suspension, applicants point to a motion filed by the Government in the District Court as part of ongoing proceedings below. They contend that, if the motion is granted, or if certain other actions are taken by the lower courts, there will be an adverse effect on the review available to them under the Detainee Treatment Act of 2005, Tit. X, 119 Stat. 2789. This does not satisfy the rigorous standard we have established for Rule 16.3 relief. Applicants do not even point to any action by the lower courts as prompting their request for extraordinary relief—only the filing of motions and posi-

ble court action. Such grounds can hardly provide a basis for believing this Court would reverse course and grant certiorari. Accordingly, suspension of the order is not warranted.



550 U.S. 398, 167 L.Ed.2d 705
KSR INTERNATIONAL
CO., Petitioner,
v.
TELEFLEX INC. et al.
No. 04-1350.
Argued Nov. 28, 2006.
Decided April 30, 2007.

Background: Exclusive licensee of patent for position-adjustable vehicle pedal assembly sued competitor for infringement. The United States District Court for the Eastern District of Michigan, 298 F.Supp.2d 581, granted summary judgment for competitor on the ground of obviousness. Licensee appealed. The United States Court of Appeals for the Federal Circuit, 119 Fed.Appx. 282, reversed. Certiorari was granted.

Holding: The Supreme Court, Justice Kennedy, held that patent was invalid as obvious.

Reversed and remanded.

1. Patents ¶26(1.1)

Patent claiming the combination of elements of prior art is obvious if the improvement is no more than the predictable use of prior art elements according to their established functions. 35 U.S.C.A. § 103.

2. Patents ¶26(1.1)

Patent composed of several elements is not proved obvious merely by demon-

1. Motivation to Modify Jahagirdar to include a touch sensor

Patent Owner's expert, Dr. Morley, admits the fundamental reasons why the Challenged Claims would have been obvious: the flip-phone of Jahagirdar and touch sensor of Schultz are prior art; there was no technical barrier to combining them; and the result of combining them was predictable. Ex. 1017 (Morley Tr.) at 176:2-177:13; Ex. 2002 (Morley Dec.) at ¶ 32 (correctly stating that this is a rationale for obviousness). As Dr. Morley explains, the Schultz touch sensors were not limited by size or arrangement, and a person of ordinary skill could have taken the Schultz sensors and put them into touch sensors the size of the buttons on Jahagirdar. Ex. 1017 (Morley Tr.) at 138:17-21; 140:2-13. And, in any event, as Dr. Morley acknowledges, the claims of the '726 patent contain no limitations as to the physical form, internal architecture, or arrangement of the touch sensors. *Id.* at 172:12-173:10. Patent Owner's remaining arguments that one of ordinary skill

1. Motivation to Modify Jahagirdar to include a touch sensor

Petitioner showed that one of ordinary skill in the art would have sought to incorporate touch sensors such as those taught in Schultz into Jahagirdar's flip-phone in order to: (1) minimize accidental actuation; (2) eliminate problems of contamination and mechanical failures; and (3) to enhance convenience and aesthetics for the user. Patent Owner's argument that "not one of these reasons

1. Motivation: **Minimize Accidental Actuation**

Patent Owner's Expert's Declaration

60. The only inadvertent activation avoided by adopting the touch sensors of Schultz in place of the pushbutton keys 144 of Jahagirdar is activation by inanimate objects. See Schultz at Col. 1, ll. 20–25. What

1. Motivation: **Minimize Accidental Actuation**

Patent Owner's Expert's Testimony

A. If you use the touch sensors of Schultz that require capacitance to ground on the order of that of an animal, such as a human, then it would not exacerbate the problem for inanimate objects.

Q. Wouldn't it actually alleviate the problem with respect to inanimate objects?

A. Yes.

1. Motivation: **Minimize Accidental Actuation**

The U.S. Court of Appeals for the Federal Circuit

[T]he Board properly found that one of ordinary skill would have been motivated to pursue the desirable properties taught by [the secondary reference], even at the expense of foregoing the benefit taught by [the primary reference].

In re Urbanski, 809 F.3d 1237, 1243 (Fed. Cir. 2016)

This argument fails because our case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention.

In re Fulton, 391 F.3d 1195, 1201 (Fed. Cir. 2004)

Indeed, we have found a reference to not teach away when, for example, it described a particular composition “as somewhat inferior to some other product for the same use.”

Apple Inc. v. Samsung Elecs. Co., 816 F.3d 788, 801 (Fed. Cir. 2016)

1. Motivation: **Minimize Accidental Actuation**

Patent Owner's Expert's Testimony

A. Okay. So I take it back. I see the error in my logic there. It appears that having an inadvertent actuation of key 150, if you wanted to replace that key and none of the others, while it wouldn't be a detriment to the operation, it certainly wouldn't help in any way.

1. Motivation: **Reduce Contamination and Mechanical Failures**

Q. What about using touch sensors outside of the context of a touchscreen? Ever be any benefit or attraction to doing that, that you can think of?

A. I think certain elevator buttons are touch-sensitive. Just makes it easier to operate, probably less maintenance or something, you know, less -- less movement. Mechanical things eventually, you know, break, whereas things that don't move, the fewer moving parts, the less to go bad.

1. Motivation: **Reduce Contamination and Mechanical Failures**

Patent Owner's Expert's Declaration

2006 hereto. I can see no reason why one of skill in the art would replace the pushbutton keys of Jahagirdar with touch sensors subject to inadvertent or unintended activation, when the alternative of membrane switches was clearly available and preferable, if the issues of contamination, prolonged use and inadvertent activation were of concern.

1. Motivation: **Reduce Contamination and Mechanical Failures**

The U.S. Court of Appeals for the Federal Circuit

[T]he Board properly found that one of ordinary skill would have been motivated to pursue the desirable properties taught by [the secondary reference], even at the expense of foregoing the benefit taught by [the primary reference].

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Apple Inc. v. Samsung Elecs. Co., 816 F.3d 788, 801 (Fed. Cir. 2016)

1. Motivation: **Enhance Aesthetics**

Q. I don't know if I missed it, but I didn't see in your declaration where you addressed specifically this -- specifically this reason to combine other than the discussion about accidental actuation. Is that right?

A. I don't believe I addressed this. I didn't see anything to address from his side other than this unsupported statement here.

1. Motivation: **Enhance Aesthetics**

Q. Why not just use a membrane switch in the elevator?

A. There may have been. With elevators too, there's aesthetics where people might use the touch sensor because it's sexier, you know, somehow it has advantages beyond those known to an engineer.

PO Arguments Involving All Patents

1. Whether Jahagirdar would have been modified to include a touch sensor
2. Whether Jahagirdar's keys 144 activated first display 516

1. IPR2015-01147, Paper 15 (Petitioner's Reply), pp. 1-10; IPR2015-01148, Paper 20 (Petitioner's Reply), pp. 1-8; IPR2015-01149, Paper 20 (Petitioner's Reply), pp. 4-11; IPR2015-01150, Paper 16 (Petitioner's Reply), pp. 1-10; IPR2015-01151, Paper 16 (Petitioner's Reply), pp. 1-10

2. IPR2015-01147, Paper 15 (Petitioner's Reply), pp. 11-16; IPR2015-01148, Paper 20 (Petitioner's Reply), pp. 8-13; IPR2015-01149, Paper 20 (Petitioner's Reply), pp. 11-17; IPR2015-01150, Paper 16 (Petitioner's Reply), pp. 11-14; IPR2015-01151, Paper 16 (Petitioner's Reply), pp. 11-15

NOTE: Claim 1 of the '970 patent does not require the "activation" Patent Owner contends Jahagirdar lacks

2. Whether Jahagirdar's keys 144 activated first display 516

'726 Patent: Both independent claims require
“activation of a visible indication” in response to the user interface
while the “load is unaffected”

1. A method for controlling a product comprising a power source, or a connection for a power source, and an energy consuming load, said method including the step of providing an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of a user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.

27. An electronic module for use with a product comprising a power source or a connection for a power source, and an energy consuming load, said module comprising an electronic circuit comprising a microchip and a touch sensor wherein said microchip and touch sensor form part of a product user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.

2. Whether Jahagirdar's keys 144 activated first display 516

'749 Patent: Both independent claims require activating a “visible indicator” in response to the user interface when the “load is not activated”

1. An electronic unit for use with a product comprising connections for a power source and at least one energy consuming load, said unit comprising:

- (a) a microchip connected to a user interface switch structure, said structure comprising at least one switch, being a touch sensor type switch that includes a sense pad;
- (b) a visible indicator controlled by the microchip to provide at least an indicator activation function when a signal is received through said user interface switch, wherein the indicator is active when the load is not activated by the user;

...

21. A method of implementing a user interface for a product comprising connections for a power supply and at least one energy consuming load, using at least a touch sensor user interface switch and a visible indicator, wherein the method includes the steps of:

- (a) activating the indicator in response to a user interface switch activation signal;
- (b) activating the indicator when the load is not activated by the user;

...

2. Whether Jahagirdar's keys 144 activated first display 516

'970 Patent: Second independent claim and dependent claims require activating a "visible indicator" with a switch when the "load is not activated"

52. A method of operating a product which includes a visible luminous indicator, an energy consuming load and a power source for powering the load, the method including the steps of operating a user interface switch, that is a touch sensor type switch which is not a serial link in a circuit from the power source to the load to power the load, to control the operation of a microchip, using the microchip to control the connection of the power source to the load and the activation of the indicator, and to activate the indicator to show at least one of the following when the load is not activated: a condition of the product, an activation of the switch, and a power level of the power source.

3. An electronic module of claim 1 wherein the configuration selected is (b) and the user interface comprises at least a touch sensor switch.

1. An electronic module for use with a product comprising an energy consuming load and a power source or a connection to a power source, said module comprising a microchip, and a switch;

...

b) wherein the visible indicator is activated at least to indicate an activation signal from the switch when the load is not activated; and

2. Whether Jahagirdar's keys 144 activated first display 516

'980 Patent: Only independent claim requires activating the "visible indicator" with the user interface while the "load is not activated"

1. An electronic module for use with a product, said product comprising a power source or a connection for a power source, and an energy consuming load, said module also comprising,
a circuit comprising a microchip and a touch sensor forming part of a user interface, wherein the microchip also controls a visible indicator that is activated in response to an activation signal received from the user interface when the load is not activated by the user.

2. Whether Jahagirdar's keys 144 activated first display 516

'952 Patent: Both independent claims require activating a “visible indication” in response to the user interface

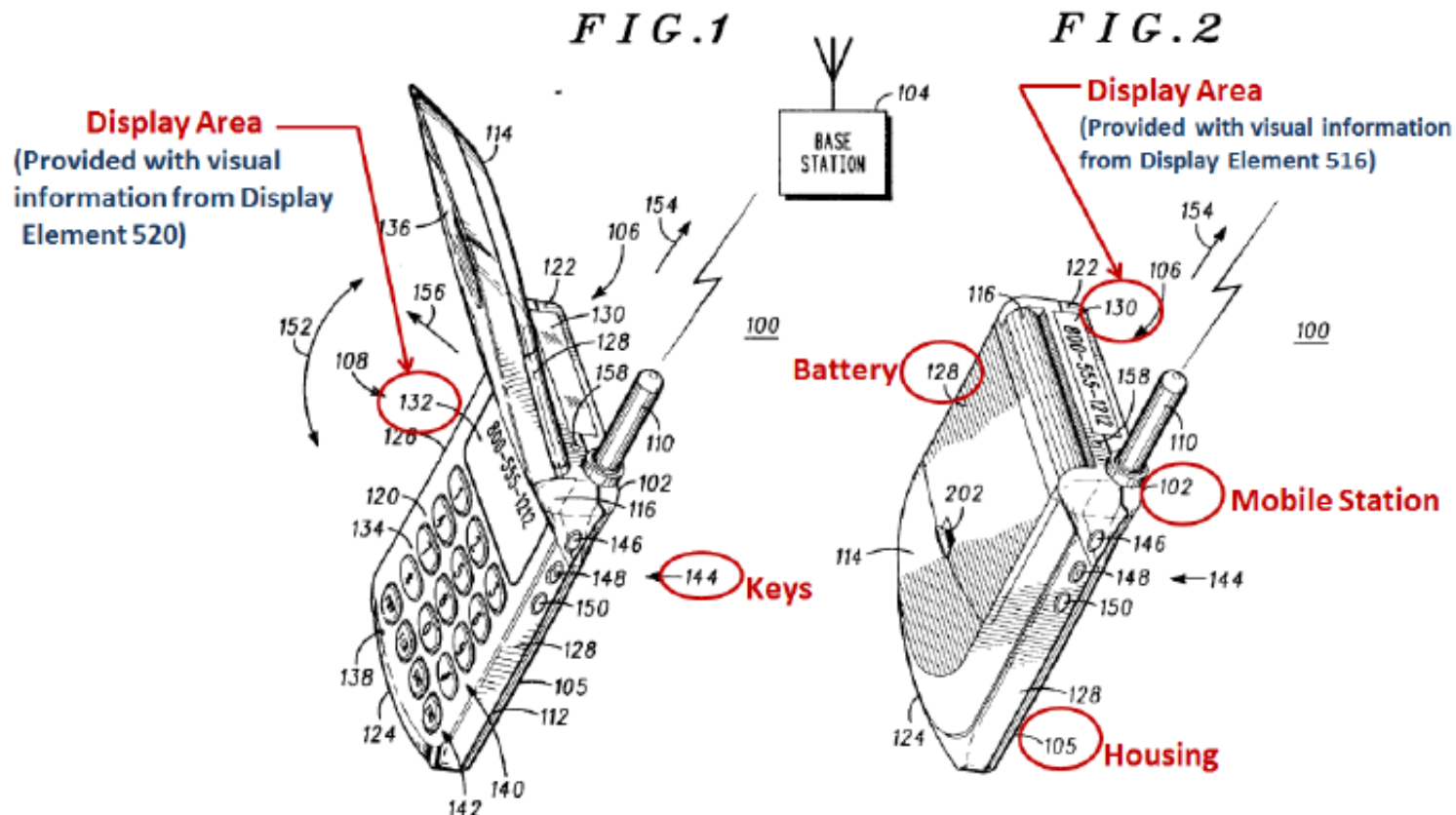
1. A method for implementing a user interface of a product, the product comprising a power source, or a connection for a power source and at least one energy consuming load, said method including the step of using an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of the user interface, said microchip at least partially implementing the touch sensor functions and said method including the step of activating a visible indication in response to an activation signal received from the user interface, wherein the visible indication provides information to a user on at least one item from the following

...

26. An electronic module for use with a product, the product comprising a power source or a connection for a power source, and at least one energy consuming load, said module comprising an electronic circuit comprising a microchip and a touch sensor wherein said touch sensor form part of the product user interface, said microchip at least partially implementing the touch sensing functions and configured to activate a visible indication in response to an activation signal received from the user interface, wherein the visible indication provides information to a user on at least one item from

...

2. Whether Jahagirdar's keys 144 activated first display 516



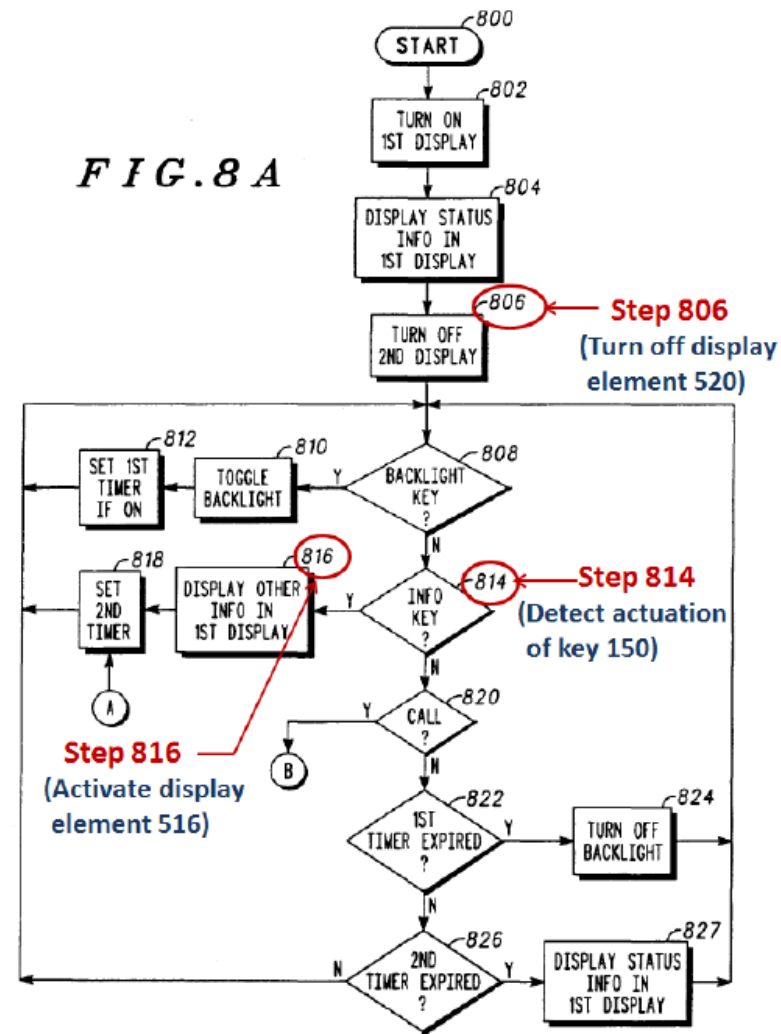
If controller 504 detects an actuation of key 150 (step 814), controller 504 sends display data to driver 514, which sends display data to display element 516. For displaying new visual information in display area 130. The new visual

2. Whether Jahagirdar's keys 144 activated first display 516

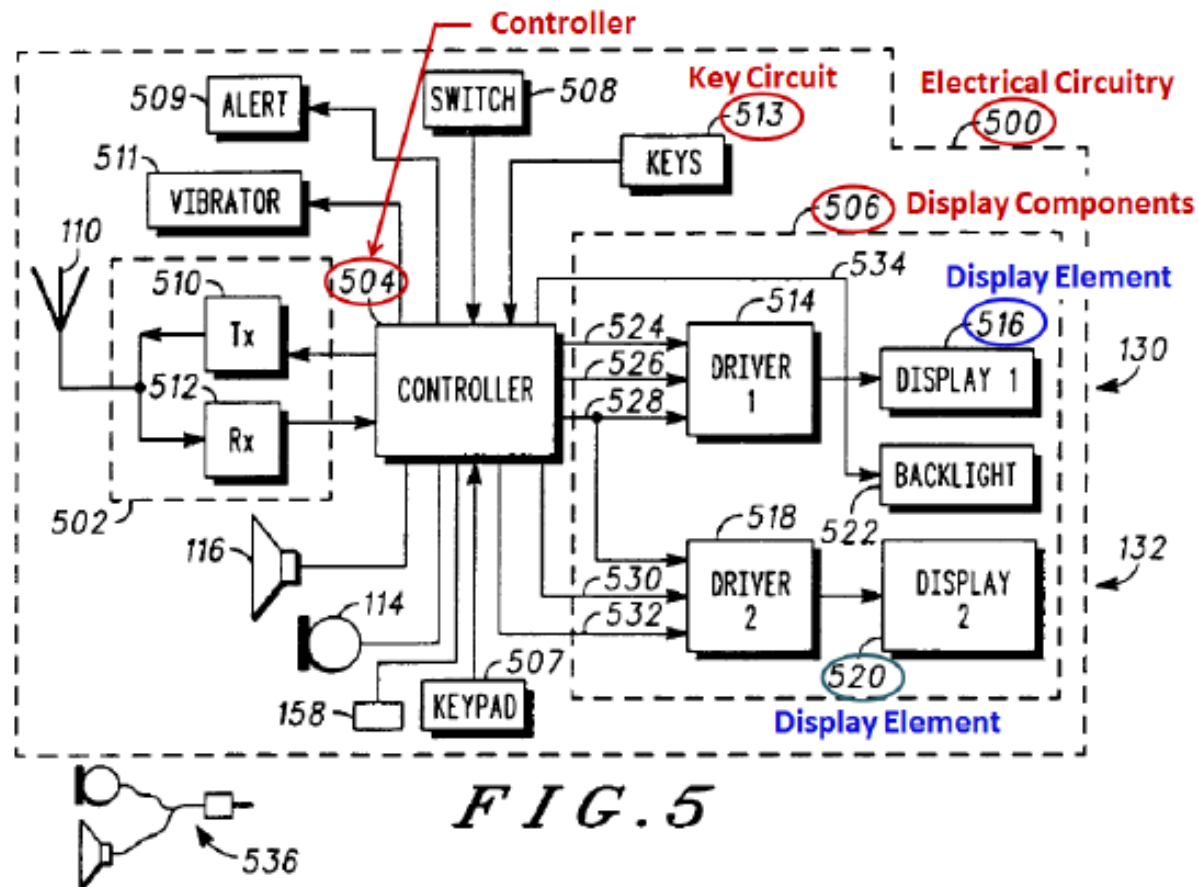
Does “displaying new visual information in display area 130”
activate Jahagirdar’s first display 516?

FIGS. 8A and 8B show a flowchart describing a method of operating electrical circuitry 500 of mobile station 102. The method described here utilizes display components 506 shown and described in relation to FIG. 5. Mobile station 102 is in a standby mode of operation. At start block 800, housing portion 114 is positioned from the open position to the closed position. Controller 504 enables power to driver 514 and display element 516 through line 524 (step 802). Controller 504 enables driver 514 for data communication via line 526, and sends display data thereto. Driver 514 sends data to display element 516 for displaying visual information, preferably status information, in display area 130 (step 804). If power was previously enabled for driver 518 and display element 520, controller 504 disables power thereto (step 806).

Here, the status information may include date and time information, battery status information such as a battery level indication and/or a low battery warning indication, communication status information such as an “in use” indication and/or a roam indication, or any combinations of the above. Alternatively, the status information may include little or no information, where display area 130 is cleared.



2. Whether Jahagirdar's keys 144 activated first display 516



2. Whether Jahagirdar's keys 144 activated first display 516

Patent Owner's Expert's Testimony

Q. And even if that display area is clear, then, nonetheless, it's still turned on assuming that power is enabled to it.

A. Correct.

Q. Right. In this design there's no way for the LED to be activated yet, nonetheless, not lit up; is that right?

A. In this example the LED is either on or off depending -- activated or deactivated -- depending upon the position of switch 1111.

Q. And when it is activated, the LED is shining, right?

A. If it's operating correctly, yes.

2. Whether Jahagirdar's keys 144 activated first display 516

A. I think actually earlier today we were talking about the flashlight example and whether just a small amount of current was -- would consider it on. So we weren't really -- we've actually already looked at the flashlight in that sort of context of sort of on, not full on, but, you know, gradations of on. And I think I said then either you have current through the load or you don't, and, if you do have, whether it's low or high, it's still on, it's activated.

Now from the perspective of a user of the device, you know, speaking from the perspective of an electrical engineer -- and we can be picky about words -- from the perspective of the user of the flashlight, if there's a small amount of current going through the filament but it's not serving any purpose of illuminating anything, they might call the thing off, not activated.

2. Whether Jahagirdar's keys 144 activated first display 516

Patent Owner admits "a touching" turned on Jahagirdar's LED

power consistent with the objectives of Jahagirdar. *Id.* And, because the LED display is turned off after a touching to turn on the LED display, the location of the display element or mobile station cannot be indicated by the LED display. Ex. 2006 at 77.

So does Patent Owner's Expert

Q. Right. In the situation you're supposing where the LED would turn off after a short period of time, how would you get it to turn back on?

A. By pressing maybe the backlight button on the side that no longer needs to control a backlight.

2. Whether Jahagirdar's keys 144 activated first display 516

Claim Construction of “activation”

¹ With very little support from the specification, and none from its expert (Ex. 1017 (Morley Tr.) at 95:11-16), Patent Owner argues that activation and deactivation mean turning on and turning off, respectively. Jahagirdar disclosed the “activation” limitation under either Petitioner’s plain meaning interpretation or Patent Owner’s proposed construction.

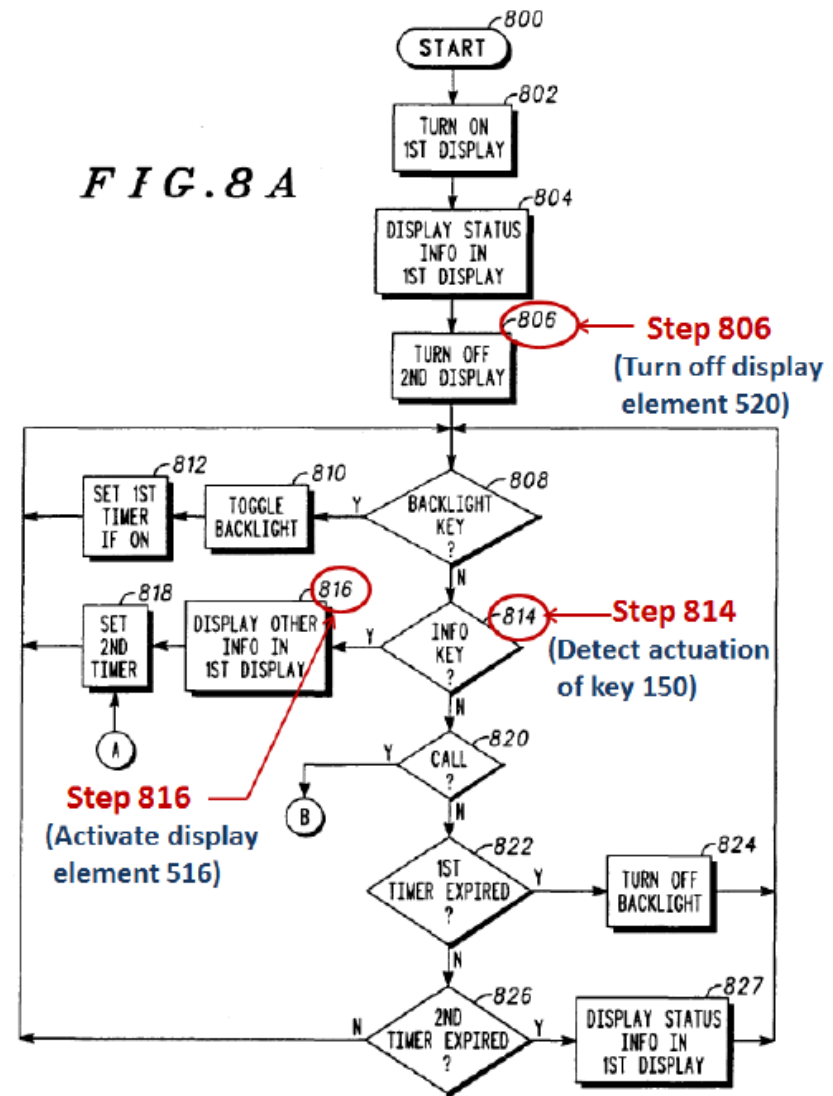
Petitioner further notes that even in embodiments where display 516 was merely changed from “status information” to “new visual information,” at least portions of the display 130 that were not previously activated did become activated in response to key 150 when the “new visual information” appeared, constituting the claimed activation of display 516. Ex. 1018 (Second Horenstein Dec.) at ¶6; Ex. 1017 (Morley Dec.) at 215:12-216:9 (discussing activation of individual LED segments). Thus, for all these reasons, Patent Owner’s argument that Jahagirdar did not disclose activation of display element 516 in response to actuation of key 150 fails.

2. Whether Jahagirdar's keys 144 activated first display 516

Does activation of display 516 occurs when display 520 is off?

FIGS. 8A and 8B show a flowchart describing a method of operating electrical circuitry 500 of mobile station 102. The method described here utilizes display components 506 shown and described in relation to FIG. 5. Mobile station 102 is in a standby mode of operation. At start block 800, housing portion 114 is positioned from the open position to the closed position. Controller 504 enables power to driver 514 and display element 516 through line 524 (step 802). Controller 504 enables driver 514 for data communication via line 526, and sends display data thereto. Driver 514 sends data to display element 516 for displaying visual information, preferably status information, in display area 130 (step 804). If power was previously enabled for driver 518 and display element 520, controller 504 disables power thereto (step 806).

FIG. 8A



Outline

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No Additional PO
Arguments Specific to
'749 & '980 Patents

PO Arguments Specific to '726 Patent

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)
4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated” ('726 Claims 5-10)

3. IPR2015-01147, Paper 15 (Petitioner's Reply) at pp. 17-19

4. *Id.* at p. 19

PO Arguments Specific to '726 Patent

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)
4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated” ('726 Claims 5-10)

3. IPR2015-01147, Paper 15 (Petitioner's Reply) at pp. 17-19

4. *Id.* at p. 19

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)

1. A method for controlling a product comprising a power source, or a connection for a power source, and an energy consuming load, said method including the step of providing an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of a user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.

4. The method of claim 1 wherein the method also includes the step of activating or deactivating the product via commands received from the user interface.

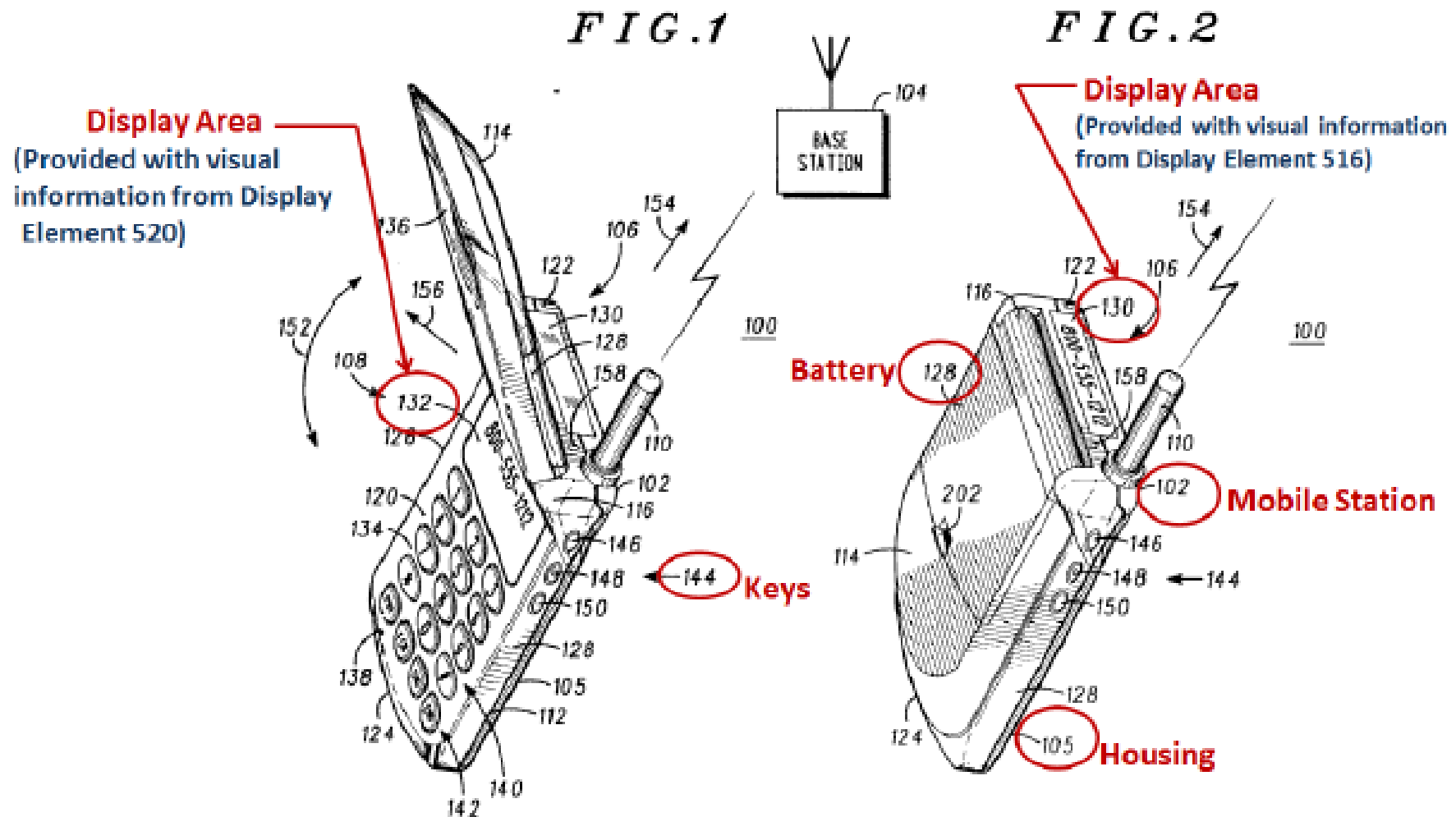
3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)

Patent Owner's conclusory statement that "[i]t is the flip phone in Jahagirdar, and not the display element or backlight, that is the product," is unavailing because it is not only unsupported by the language of claim 4 and the rest of the '726 patent, but also unsupported by Dr. Morley's Declaration and testimony. Paper No. 13 (Patent Owner Response) at p. 25.

1. A method for controlling a product comprising a power source, or a connection for a power source, and an energy consuming load, said method including the step of providing an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of a user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)

Jahagirdar's "PWR" Button



3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)

Q. So how do you know that the buttons on the side are a separate user interface than the buttons on the front?

A. Because the user doesn't have access to -- you couldn't call it -- you'd have to say there's one section of the user interface that's hidden and one that's open. It seems to me that that's not logical. They're really two different things. Either you have access to -- and that's the one on the outside you always have access to. And then the one on the inside you have access to only when you open it up. Look, voilà, there's another user interface here.

Q. But if the phone is open, then you can access both the front buttons and the side buttons, right?

A. That's correct.

PO Arguments Specific to '726 Patent

3. Whether Jahagirdar taught activation or deactivation of a product through commands received from the user interface ('726 Claim 4)
4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated” ('726 Claims 5-10)

3. IPR2015-01147, Paper 15 (Petitioner's Reply) at pp. 17-19

4. *Id.* at p. 19

4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated”
(’726 Claims 5-10)

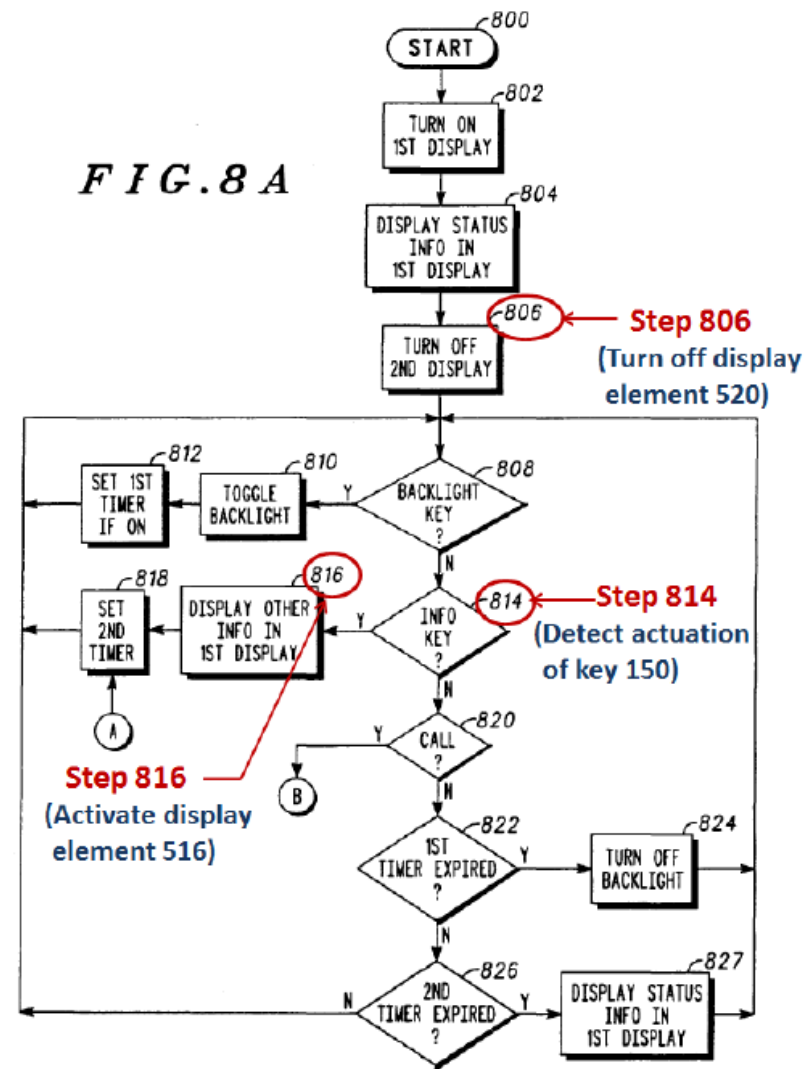
1. A method for controlling a product comprising a power source, or a connection for a power source, and an energy consuming load, said method including the step of providing an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of a user interface, said microchip adapted to control the activation of a visible indication in response to an activation signal received from the user interface while operation of the load is unaffected.

5. The method of claim 1 wherein the method also includes the step of automatically deactivating the visible indication a predetermined period of time after it was activated.

4. Whether Jahagirdar disclosed “automatically deactivating the visible indication a predetermined period of time after it was activated” (’726 Claims 5-10)

If controller 504 detects an actuation of key 150 (step 814), controller 504 sends display data to driver 514, which sends display data to display element 516. For displaying new visual information in display area 130. The new visual information includes information different from or in addition to the status information, and may include date and time information, battery status information such as a battery level indication and/or a low battery warning indication, communication status information such as an “in use” indication and/or a roam indication, or any combinations of the above. **Controller 504 sets a timer related to the new display information (step 818).**

FIG. 8A



PO Arguments Specific to '970 Patent

5. Whether Jahagirdar taught a “luminous visible location indicator” ('970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)
6. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

5. IPR2015-01149, Paper 20 (Petitioner's Reply) at pp. 1-3

6. *Id.* at p. 17

PO Arguments Specific to '970 Patent

5. Whether Jahagirdar taught a “luminous visible location indicator” ('970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)
6. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

5. IPR2015-01149, Paper 20 (Petitioner's Reply) at pp. 1-3

6. *Id.* at p. 17

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

1. An electronic module for use with a product comprising an energy consuming load and a power source or a connection to a power source, said module comprising a microchip, and a switch;

said switch being a user interface and does not form a serial link in a circuit that transfers power from the power source to power the load, and said microchip controlling a luminous visible location indicator that is not the load according to at least one configuration selected from the following group:

...

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

Jahagirdar disclosed that its display element 516 could be an LED

Display elements **516** and **520** provide visual information in display areas **130** and **132**, respectively, for a user of mobile station **102**. Each of **display elements 516** and **520** may comprise any suitable display or displays such as a **light emitting diode (LED) display** or a liquid crystal display (LCD). In addition to having illuminating segments or pixels, such displays may include illuminating icons.

Mobile station **902** includes a display area **914** outwardly directed from a front of housing portion **902**, and a display area **916** outwardly directed from housing portion **904**. When housing portion **904** is moved to the closed position, display area **914** is obstructed from view, whereas display area **916** is available for viewing. **Display area 914 preferably includes a single line LED display**, and display area **916** preferably includes a large graphics LCD. **Mobile station 902 operates similarly or in the same way as mobile station 102 as described in relation to the flowchart of FIGS. 8A and 8B.**

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

Patent Owner’s Expert’s Testimony

Q. And I think you start discussing this at paragraph 74. Just so I understand, an LED is luminous, right?

A. Emits light. That's what the E in LED stands for, emit.

Q. And assuming the lighting conditions are suitable, it's visible, right?

A. Generally speaking, it's always visible, yes, light or dark.

Q. So the issue with the LED top display being a luminous visible location indicator is whether it's indicating location. That's the difficulty, right?

A. Correct.

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

Patent Owner’s Expert’s Testimony

Q. So there Jahagirdar is saying that, if you make the smaller display an LED, it's going to operate either similarly or in the same way as 8A and 8B.

A. Okay.

Q. Now if it operates the same way, then the little display is on all the time, whenever the flap is closed, right?

A. That's correct.

Q. And then it would be a luminous visible find-in-the-dark indicator, right?

A. For a short while until the battery dies.

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

Patent Owner’s Expert’s Testimony

Q. Now if it operated in the way that you suggest with a timer to turn it off, which sounds like a reasonable design choice, it would still be a luminous visible location indicator for the period when the timer was running, right?

A. For those with short-term memory problems where they -- because they would have had it in their hand to close the lid, to turn it on, and then it would turn off shortly thereafter, so, yes, it would -- but little value, I would think. I think to find -- as a location indicator, it would be nice that it were -- you were able to find it after you had used it for some time and you don't remember where it is.

5. Whether Jahagirdar a “luminous visible location indicator” (’970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)

Third, Patent Owner incorrectly assumes that the claimed location indicator must indicate the location of the *product*. Nothing in claim 1 or the specification of the ’970 requires this construction, and Patent Owner cites no evidence whatsoever supporting it. Claim 1 itself merely recites the location indicator, and then requires that the indicator is configured to be able to accomplish at least one of three functions, none of which includes indicating to the user the location of the product with which the claimed electronic module is used. Instead, as Patent Owner itself states, a location indicator is merely required “to indicate a location.” Paper 17 (Patent Owner Response) at p. 5. And the thing whose location is being indicated could be the indicator itself, the electric module, or the user interface.

PO Arguments Specific to '970 Patent

5. Whether Jahagirdar taught a “luminous visible location indicator” ('970 Claims 1, 3-5, 10-14, 19, 48, 49, and 51)
6. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

5. IPR2015-01149, Paper 20 (Petitioner's Reply) at pp. 1-3

6. *Id.* at p. 17

2. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

1. An electronic module for use with a product comprising an energy consuming load and a power source or a connection to a power source, said module comprising a microchip, and a switch;

said switch being a user interface and does not form a serial link in a circuit that transfers power from the power source to power the load, and said microchip controlling a luminous visible location indicator that is not the load according to at least one configuration selected from the following group:

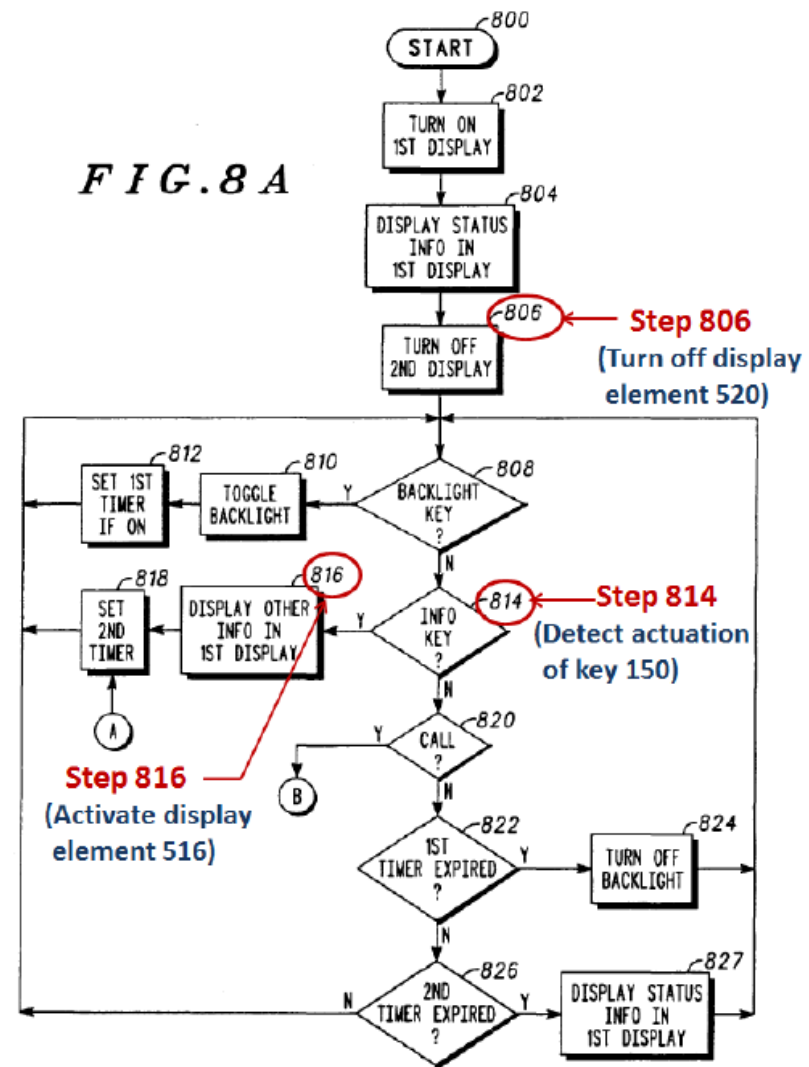
- a) wherein the visible indicator at least indicates a condition of the product upon receiving a signal from the user interface switch, and wherein the switch is a touch sensor type switch;
- b) wherein the visible indicator is activated at least to indicate an activation signal from the switch when the load is not activated; and
- c) wherein the visible indicator is also used to indicate a power level of the power source when the load is switched off and the product is not connected to a mains supply.

5. An electronic module of claim 3 wherein the location indicator is activated only for a period of time.

2. Whether Jahagirdar disclosed activation for only a period of time ('970 Claim 5)

If controller 504 detects an actuation of key 150 (step 814), controller 504 sends display data to driver 514, which sends display data to display element 516. For displaying new visual information in display area 130. The new visual information includes information different from or in addition to the status information, and may include date and time information, battery status information such as a battery level indication and/or a low battery warning indication, communication status information such as an "in use" indication and/or a roam indication, or any combinations of the above. Controller 504 sets a timer related to the new display information (step 818).

FIG. 8A



PO Arguments Specific to '970 Patent

7. Whether Jahagirdar disclosed automatic deactivation of its visible indication ('952 Claim 23)

7. Whether Jahagirdar disclosed automatic deactivation of its visible indication ('952 Claim 23)

1. A method for implementing a user interface of a product, the product comprising a power source, or a connection for a power source and at least one energy consuming load, said method including the step of using an electronic module comprising an electronic circuit including a microchip and a touch sensor forming part of the user interface, said microchip at least partially implementing the touch sensor functions and said method including the step of activating a visible indication in response to an activation signal received from the user interface, wherein the visible indication provides information to a user on at least one item from the following group:

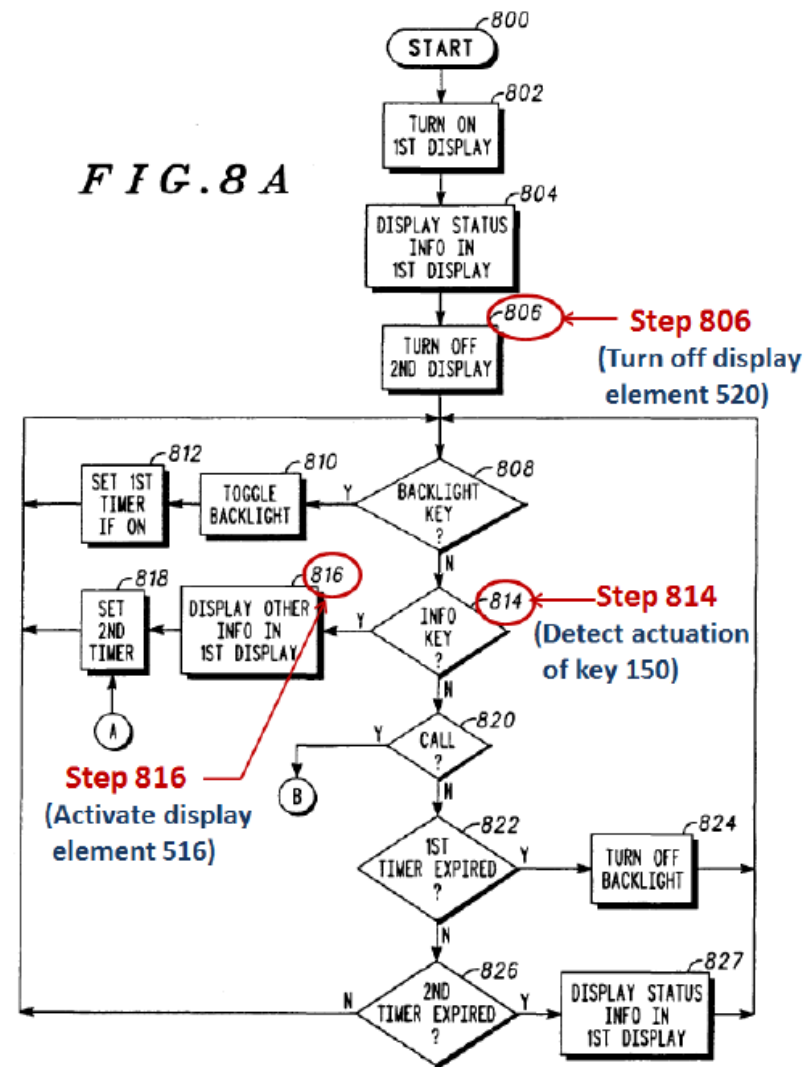
- a state or condition of the product,
- location of the user interface,
- a battery power level indication.

23. The method of claim 1 wherein the method also includes the step of automatically deactivating the visible indication a predetermined period of time after it was activated.

7. Whether Jahagirdar disclosed automatic deactivation of its visible indication ('952 Claim 23)

If controller 504 detects an actuation of key 150 (step 814), controller 504 sends display data to driver 514, which sends display data to display element 516. For displaying new visual information in display area 130. The new visual information includes information different from or in addition to the status information, and may include date and time information, battery status information such as a battery level indication and/or a low battery warning indication, communication status information such as an "in use" indication and/or a roam indication, or any combinations of the above. **Controller 504 sets a timer related to the new display information (step 818).**

FIG. 8A



Outline

- I. Overview of Obviousness (Jahagirdar + Schultz) and Patent Owner Arguments
- II. Patent Owner Arguments Affecting All Patents
- III. Patent Owner Arguments Affecting Particular Patents

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing
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was served via email this 1st day of August, 2016, on the following:

Respectfully submitted,

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