

Inter Partes Review
U.S. Patent No. 9,022,294

Oral Argument, March 25, 2026

Apple Inc. v. DH International, LTD.;
Case No. IPR2025-00172

Petitioner's Demonstrative Exhibits – Not Evidence

Petitioner's DX-I
IPR2025-00172 - Apple EX1023

Challenged Patent

- ▶ The '294 Patent was filed on October 21, 2009, a continuation-in-part of U.S. App. No. 10/552,912, filed on April 14, 2003. Because the '912 Application does not provide support for the challenged claims, the priority date of the '294 Patent is **October 21, 2009**.

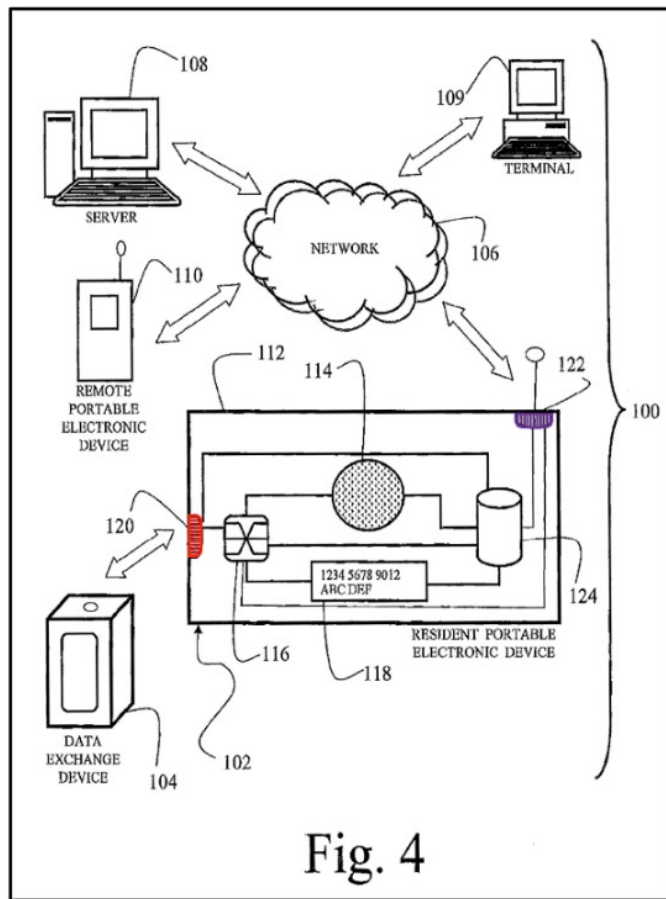


Fig. 4

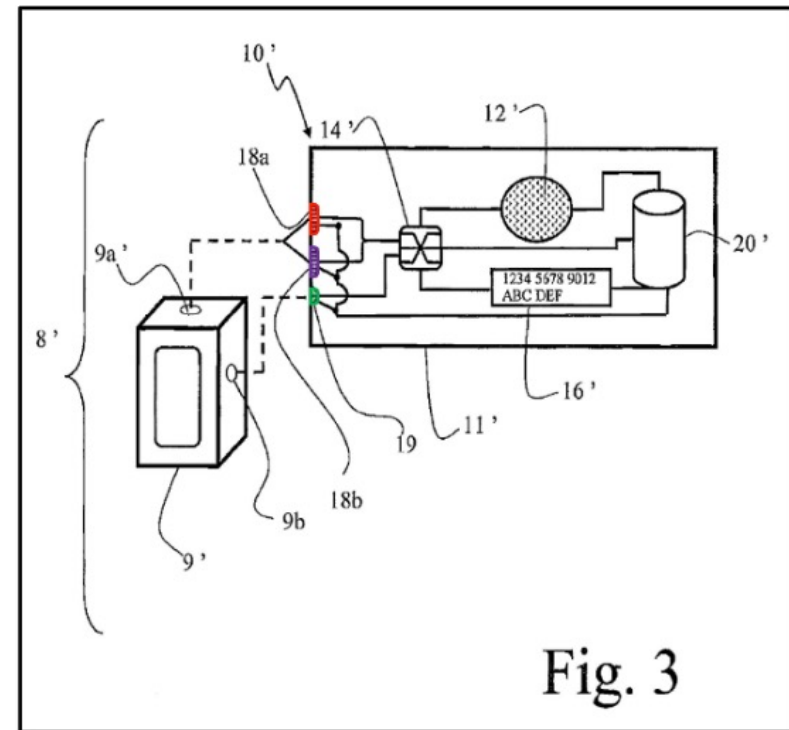
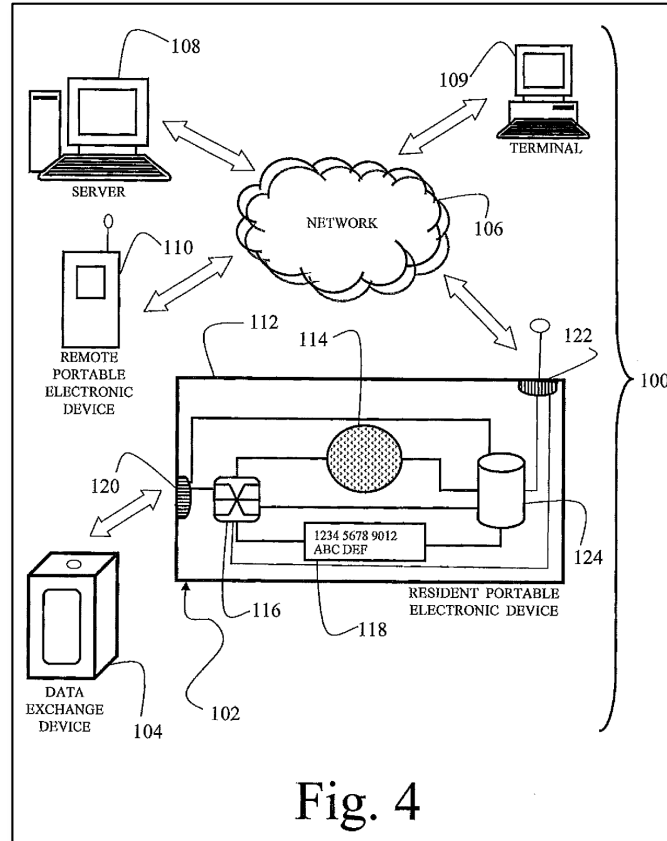


Fig. 3

Challenged Patent's Disclosure

- ▶ (1) Toggle switching element between first and second state based on optional reception of activation cue
- ▶ (2) User triggers control device to send data through path set by switching element



If an activation cue is received by the portable electronic device **102** cue receiver, the switching element within electronic circuit **116** will be assigned its first state. This means that if it is already in its first state, it will remain as such; while if it is in another state, it will be switched to its first state. If no activation cue is received by the portable electronic device **102** cue receiver, the switching element within electronic circuit **116** will be assigned its second state. This means that if it is already in its second state, it will remain as such; while if it is in another state, it will be switched to its second state.

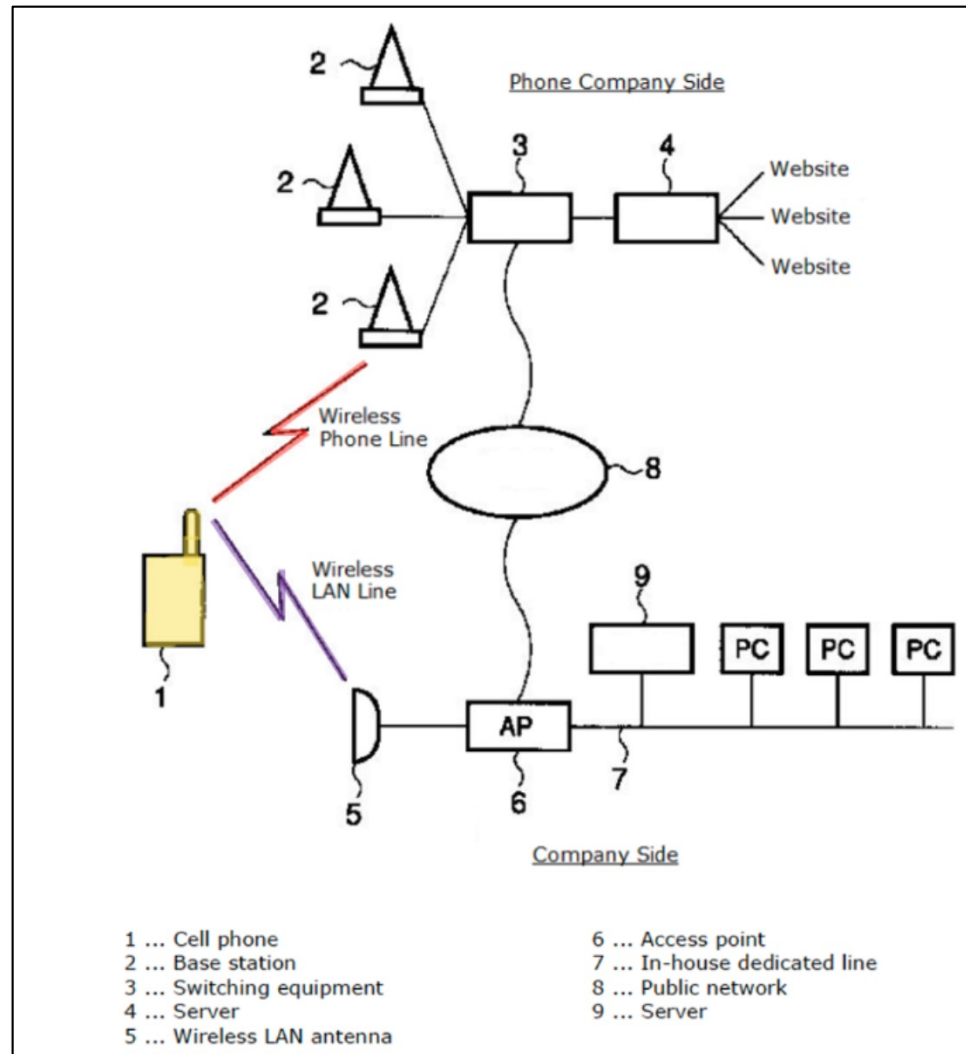
Upon control device **114** having been triggered, if the switching element is in its first state, the method then comprises forwarding first data to first transceiver **120** for initiating a data exchange operation with first external data exchange device **104**.

However, if the switching element is in its second state, which is the case if no activation cue has been received, the method then instead comprises forwarding second data to second transceiver **122** for initiating a data exchange operation with a second external data exchange device.

'294 Patent - Exemplary Claim 1

1. A cellular phone, comprising:
an electronic circuit capable of storing data therein,
capable of processing data, and capable of data input and
output;
a user-triggered control device operatively linked to said
electronic circuit, said user-triggered control device
configured to be operated by a user via one of a button,
a keypad, a tactile screen, and a biometric parameter
detector, and after being operated issue an invariable
activation command, with said invariable activation
command being issued when said control device is
selectively triggered by the user;
a first data transceiver operatively linked to said electronic
circuit, said first data transceiver being for exchanging
data between said electronic circuit and a first external
data exchange device over a first communication link;
a second data transceiver operatively linked to said elec-
tronic circuit, said second data transceiver being for
exchanging data between said electronic circuit and a
second external data exchange device over a second
communication link that is distinct from said first com-
munication link;
a cue receiver operatively linked to said electronic circuit
for receiving an activation cue from a source external to
said cellular phone;

Suga (Ex. 1005)



Suga (Ex. 1005) - Continued

Based on cellular mobile communication services provided by a phone company, the cell phone 1 is able to place calls to other phones via a wireless phone line that connects to a base station 2, exchange data with websites via an Internet connection service, and exchange data (such as sending and receiving e-mail) with other information devices. The cell phone 1 also exchanges data (such as e-mail) with other devices via a wireless LAN line.

Settings Screen

During Transmission

☒ Prioritize use of wireless LAN

_____ Conditions _____

☐ When type of content is XXXX

☐ When content volume exceeds XXXX

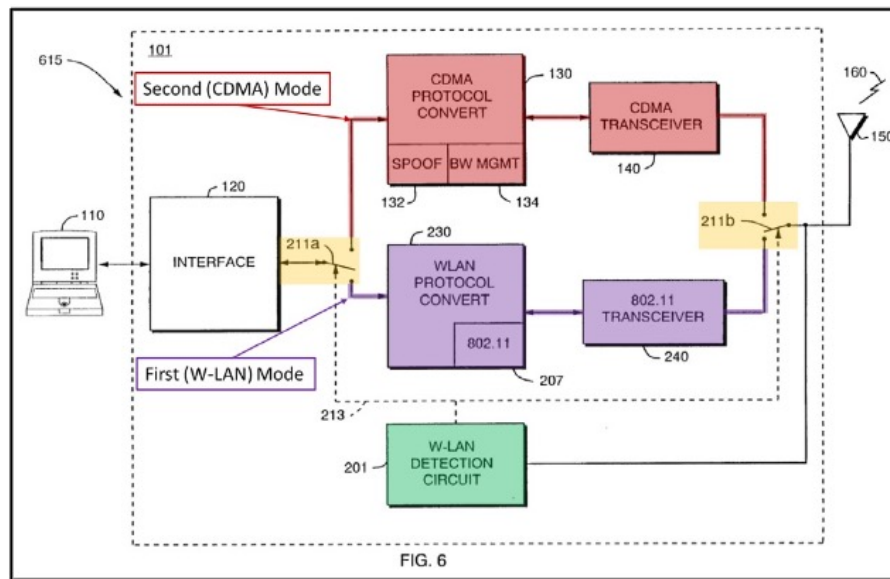
☒ Automatically switch to phone line if wireless LAN line cannot be used

During Reception

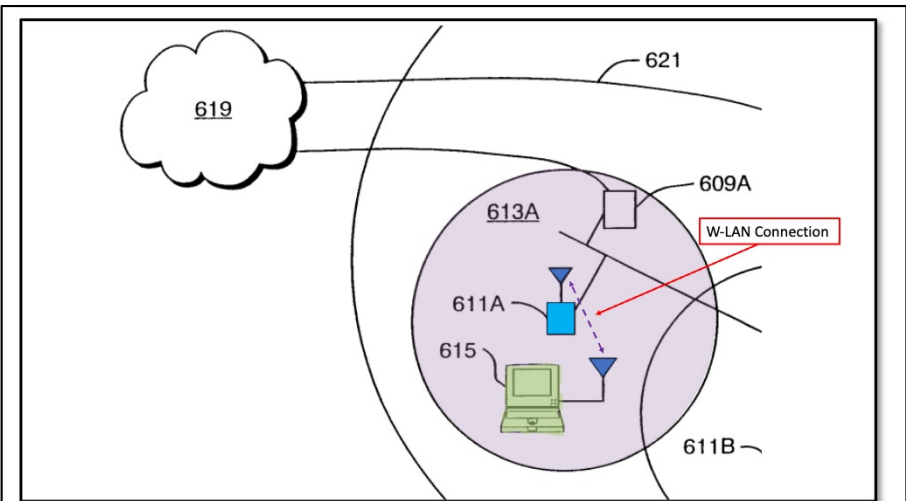
☒ Prohibit reception of data over phone lines

***Gorsuch* (Ex. 1006)**

- ▶ Gorsuch provides detailed descriptions of switching between a local wireless connection and long-range cellular connection on a mobile device

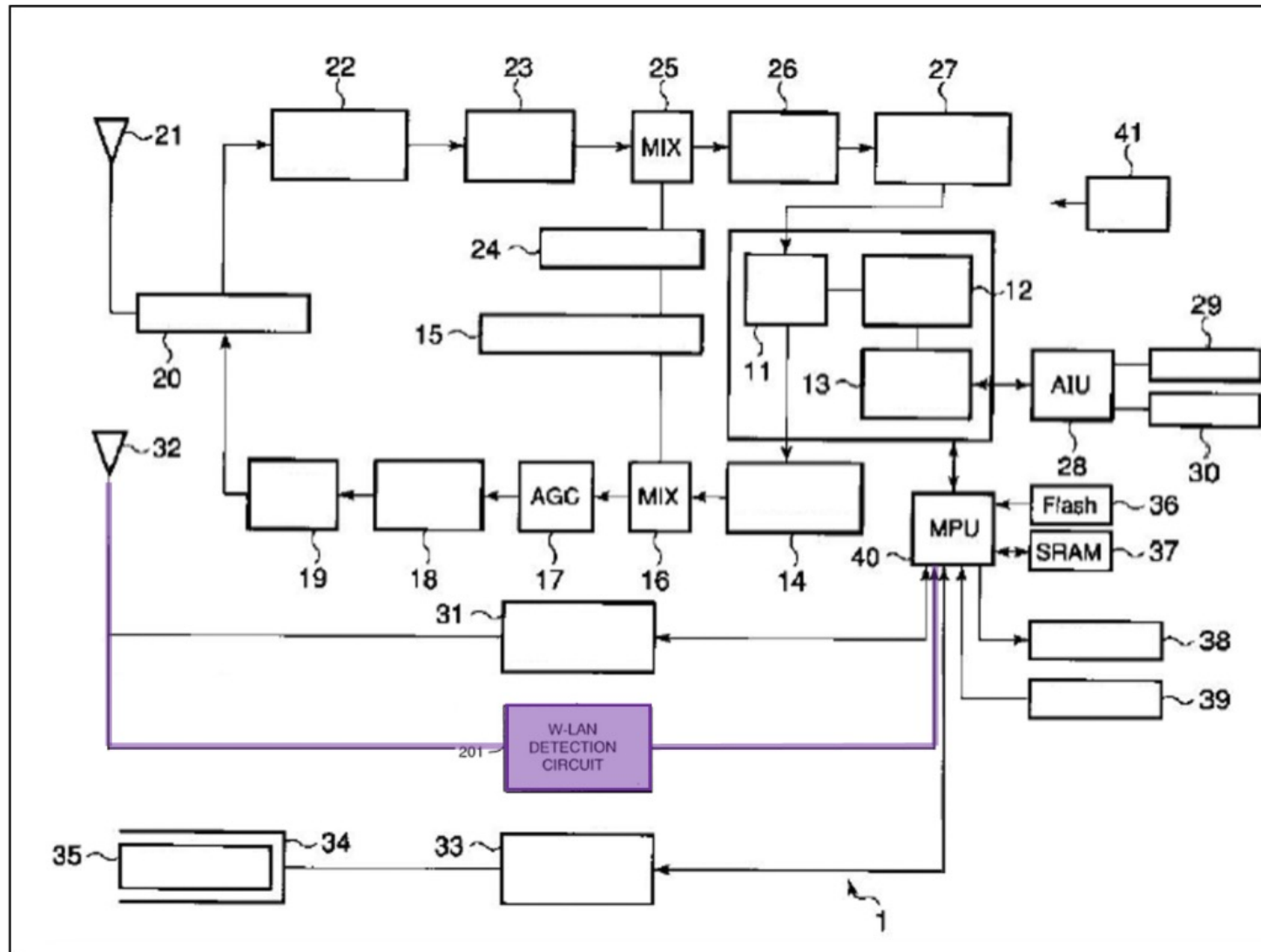


W-LAN transceiver 240 (within the subscriber unit of terminal 615, 617) can communicate with W-LAN base station 611A when the transceiver 240 is within the range 613A of the base station. *Id.*, 4:15-18, 13:1-10, Fig. 5. This communication path over the W-LAN connection is shown in the annotated excerpt of Fig. 5 below.



Id., Fig. 5 (annotated to indicate terminal 615 within range of W-LAN base station 611A).

Combination of *Suga* and *Gorsuch*



Remaining Disputes

Disputes addressed in PO's Sur-Reply and still at issue

1) Data Exchange Devices

- ▶ Nothing in the claims, specification, or record supports PO's claim that data exchange device need to originate or terminate data

2) Updated Translator's Affidavit

- ▶ Allowing an updated affidavit is consistent with the Board's practice and purpose of IPR proceedings

Disputes PO Appears to Have Conceded

1) Control Device and Invariable Authorization Command

- ▶ The terms “control device” and “authorization command” are security agnostic

2) Suga’s User-Configured Priority Settings

- ▶ *Suga*’s priority settings are set prior to the user triggering the device to send an email

3) Construction of Terms Construed in Institution Decision

- ▶ PO provides no reasons for the Board to deviate from its preliminary findings construing “invariable activation command,” “activation cue,” and “data conveyance switching element”

4) Motivation to Combine

- ▶ *Suga*, *Gorsuch*, and the ’294 Patent are from the same field of endeavor

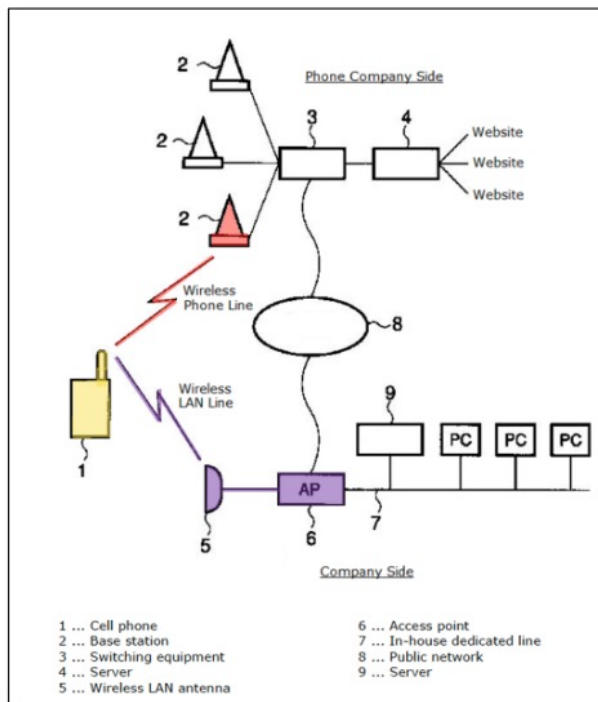
5) “Direct Link” and “Close Proximity”

- ▶ The *Suga* device exchanges data with the W-LAN access point via a “direct link” within a “close proximity”



Data Exchange Devices

Data Exchange Devices: Petitioner's Mappings



Suga, Fig. 1 (annotated excerpt); *Dec.*, ¶104.

Suga's W-LAN communications, as shown in annotated Fig. 1 below, are conducted over the W-LAN line (in purple below) (“first communication link”) between the W-LAN transceiver and the access point 6 (“first external data exchange device”). *Suga*, [0016]-[0017], Fig. 1; *see also* Claim [1(c)]. *Suga's* cellular communications, as shown in annotated Fig. 1 below, are conducted over the wireless phone line (in red below) (“second communication link”) between the cellular transceiver and base station 2 (“second external data exchange device”). *Suga*, [0016]-[0017], Fig. 1; *see also* Claim [1(d)].

Data Exchange Devices: Disputed Claim Requirement

Exemplary Limitation Claim 1(c): “a first data transceiver operatively linked to said electronic circuit, said first data transceiver being for exchanging data between said electronic circuit and a first **external data exchange device** over a first communication link”

Disputed Requirement: Whether
“external data exchange device” must be an
endpoint

Mapping: *Suga* teaches access point 6
and base station 2



The access point and base
station are external to and
exchange data with *Suga*’s Cell
Phone

Data Exchange Devices: PO's Inconsistent Claim Construction

The data exchange device, by its plain meaning, is a device or node on a network or a device that is directly linked without a network connection, which is consistent with the specification. It is shown in Figures 1, 3, and 4 of the '294 patent.

POR, 11

In an unrelated and pending IPR proceeding, PO argued that “[t]he data exchange device, by its plain meaning, which is consistent with the specification, is *a device*[.]” and further argued that “[a]n external data exchange device is not a transceiver but *a device with a transceiver*.” *Google LLC v. DH International Ltd.*, IPR2024-01322, Paper 17, 7-8 (PTAB, June 09, 2025).

Reply, 10, discussing *Google LLC v. DH International Ltd.*, IPR2024-01322, Paper 17, 7-8 (PTAB, June 09, 2025)

- ▶ Neither claim construction advanced by PO excludes routers and intermediary devices
- ▶ “In sum, to the extent the Board expressly construes this language, data exchange devices are simply devices or nodes that send and/or receive data.” *Reply*, 11

Data Exchange Devices: PO's Construction Changes in its Argument

- ▶ PO advances a third construction in its argument; that the data exchange device must be the data's end destination:

The “data exchange device” is the device identified as the data's end destination, not a network access point or network infrastructure that passes the data.

A POSITA would know the “activation cue” would have to come from the actual device expecting to receive the data (e.g., “data exchange device”). Exh. 2001, ¶85.

The Petition is mixing apples and oranges. The '294 patent is for sending data to a data exchange device, a device that is expecting to receive the data, not intermediary devices that support creating a network connection that routes packets blindly at a network level.

POR, 32

Data Exchange Devices: The Record Supports Petitioner's Mapping

As set forth in Section IV.B.1, to the extent the Board expressly construes this language, data exchange devices are simply devices or nodes that exchange data. Suga's W-LAN access point and cellular base stations are unequivocally devices that exchange data. Paper 1, 39-44, 52-56. Indeed, a POSITA would have understood Suga's access point and base station provide bidirectional data communications on their respective networks. Ex. 1021, ¶¶6-10.

Reply, 21



Updated Translator's Affidavit

Updated Translator's Affidavit's Are Common

- ▶ Common practice for the Board to allow corrected affidavits to be submitted
 - ▶ See *TSMC v. DSS Tech. Mgmt*, IPR2014-01030, Paper 11 at 3 (PTAB Feb. 3, 2015), Ex. 1004, Ex. 2012; see also *Handiquilter v. Bernina Int'l*, IPR2013-00364, Paper 10 at 2 (PTAB Sep. 13, 2013), Ex. 1005 (June 17, 2013), Sub. Ex. 1005 (Sep. 18, 2013); see also *Medtronic v. Nuvasive*, IPR2014-00074, Paper 14 at 2 (PTAB Apr. 1, 2014)



Control Device and Invariable Authorization Command

Control Device and Invariable Authorization

Command:

PO's Construction

- ▶ PO bases its arguments on the unsupported claims that the '294 Patent is limited to financial transactions and focused on security. Reply, 15-16
 - ▶ Control device:

There is no description in *Suga* suggesting that the keyboard of *Suga* is used for activating a security feature as “a button, a keypad, a tactile screen, and a biometric parameter detector, and after being operated, issues an invariable activation command.” Exh. 1001, 19:1-6. Exh. 2001, ¶76.

POR, 26

- ▶ Invariable Activation Command:

Responding to a confirmation prompt is not authorization. Authorization is a security approach that requires the input of security data, as discussed in the '294 Patent. See Exh. 1001, 15:14-18. Confirmation is responding to a prompt that confirms an action or provides additional actions that can be selected. No security data is described in any of the examples cited by the Petitioner's expert (and not found in the combination of *Suga* or *Gorsuch*). Exh. 2001, ¶175.

POR, 57

Control Device and Invariable Authorization Command:

The Record Supports Petitioner's Mapping

- ▶ Control device is not limited to security related embodiments

Control device 12 can be any suitable device allowing the portable electronic device holder to selectively trigger a data conveyance operation as detailed hereinafter. Control device 12 can be for example a single manually activated button provided on the portable electronic device main body 11 (as schematically illustrated in FIGS. 1-3) which, when pressed, issues an activation command that triggers a particular data conveyance as described hereinbelow.

'294 Patent, 8:29-36

- ▶ Authorization Command is Security Agnostic

The method also comprises selectively triggering control device 114 to issue an invariable activation command. As noted above, this may be accomplished by entering a PIN code, pressing an authorization button, entering a PIN code AND pressing on an authorization button, or the like.

'294 Patent, 15:14-18



***Suga's* User-Configured Priority Settings**

***Suga's* User-Configured Priority Settings: *Suga's* Settings are Selected Before Triggering**

Settings Screen

During Transmission

☒ Prioritize use of wireless LAN

_____ Conditions _____

☐ When type of content is XXXX

☐ When content volume exceeds XXXX

☒ Automatically switch to phone line if wireless LAN line cannot be used

During Reception

☒ Prohibit reception of data over phone lines

Suga, Fig. 5

When the user gives instructions to send data such as an e-mail, the controller determines whether or not the "Priority use of wireless LAN" setting **has been enabled** (step A1).

Suga, [0047]



Construction of Terms Construed in Institution Decision

Construction of Terms Construed in Institution Decision

- ▶ The Board construed the terms “invariable activation command,” “activation cue,” and “data conveyance switching element”
- ▶ PO merely recited the arguments presented originally in the *POPR* in the *POR*
- ▶ The Boards constructions were properly based on the intrinsic evidence of record

Activation Cue:

“Intended as predetermined indicator”

- ▶ PO asks the Board to read in the requirement that the “‘activation cue’ must be intended as a predetermined indicator.” *POR*, 9

We agree with Petitioner that “the ’294 Patent does not support limiting the claimed ‘activation cue’ to something that is intended as a predetermined indicator,” and “[n]othing in the ’294 Patent’s description requires the activation cue to be ‘intended as’ a predetermined indicator.” Reply 1, 3 (citing Ex. 1001, 9:24–27; *Kamstrup A/S v. Axioma Metering UAB*, 43 F.4th 1374, 1383-84 (Fed. Cir. 2022)).

Google LLC v. DH International Ltd., IPR2024-01322,
Paper 33, 14-15 (PTAB, February 10, 2026)

Motivation to Combine *Suga* and *Gorsuch*

Motivation to Combine *Suga* and *Gorsuch*: Field of Endeavor – Similar Argument Rejected

First, the challenged claims are not limited to financial transactions. *Id.* (citing Pet. 2; Ex. 1014 ¶¶ 27, 33). Second, Mooney is in the same field of endeavor as the '294 Patent—portable electronic devices capable of alternate data conveyance operations—and addresses a similar problem—switching between alternate data conveyance operations.

Google LLC v. DH International Ltd., IPR2024-01322,
Paper 33, 36-37 (PTAB, February 10, 2026)

Motivation to Combine *Suga* and *Gorsuch*: Field of Endeavor - *Suga* and the '294 Patent

Upon the control device being triggered, if the switching element is in its first state, first data will be forwarded to the first data transceiver for initiating a data exchange operation with a first external data exchange device; while if the switching element is in its second state, second data will be forwarded to the second data transceiver for initiating a data exchange operation with a second external data exchange device.

'294 Patent, Abstract

The present invention is also a portable information device comprising: a wireless phone line connecting means that enables connection to a wireless phone line; a wireless LAN line connecting means that enables connection to a wireless LAN line; a switching means for selectively performing switching to use one of the wireless phone line and the wireless LAN line; and a setting means that enables a setting so that use of the wireless LAN line is prioritized during a data transmission.

Suga, [0010]

Motivation to Combine *Suga* and *Gorsuch*: Field of Endeavor - *Gorsuch* and the '294 Patent

Upon the control device being triggered, if the switching element is in its first state, first data will be forwarded to the first data transceiver for initiating a data exchange operation with a first external data exchange device; while if the switching element is in its second state, second data will be forwarded to the second data transceiver for initiating a data exchange operation with a second external data exchange device.

'294 Patent, Abstract

(57) Abstract: A technique for communicating with a local area network (LAN) via a wireless connection determines whether a first short-range, high-speed, wireless communication path is available and connects to the LAN using a longer range, lower speed wireless communication path if the short-range, high-speed wireless communication path is not available.

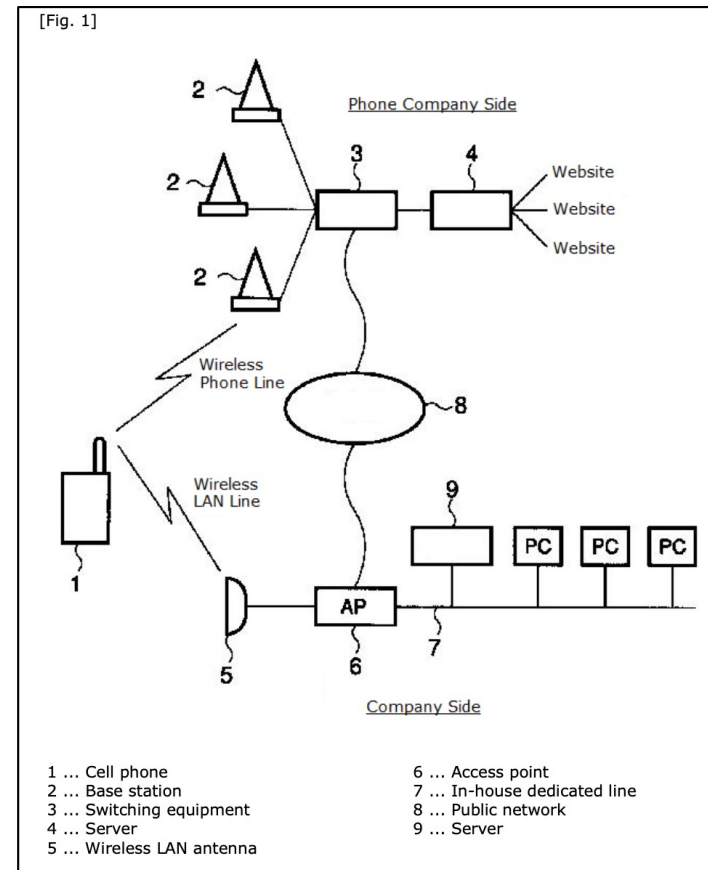
Gorsuch, Abstract

“Direct Link” and “Close Proximity”

“Direct Link” and “Close Proximity”: “Direct Link”

According to another embodiment, the data exchange system of the invention may be used to control data conveyance within a resident portable electronic device in a transaction wherein data will either be conveyed towards a first portable device transceiver to be communicated to an external data exchange device for example through a direct link, or towards a second portable device transceiver for downloading information towards a second external data exchange device such as a server or a remote portable electronic device. Herein, the expressions “resident” and “remote” are used to differentiate two portable electronic devices wherein one is remote relative to the so-called resident portable electronic device.

'294 Patent, 13:12-24



Suga, Fig. 1

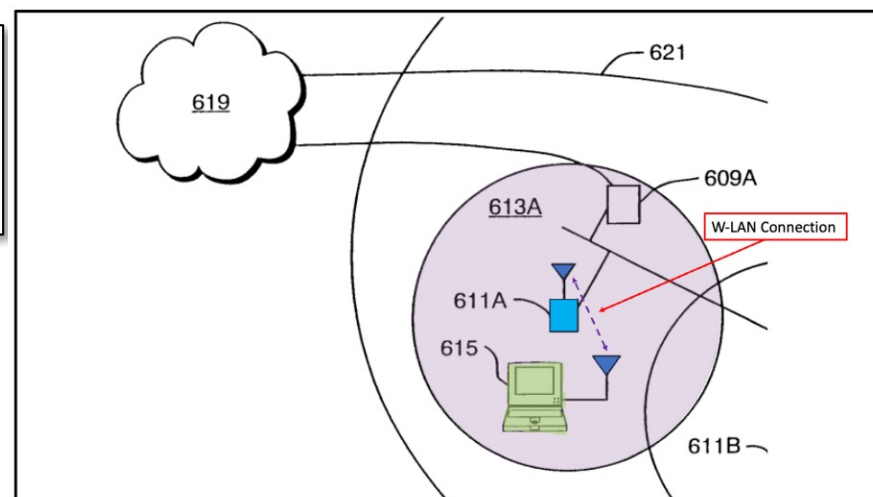
“Direct Link” and “Close Proximity”: “Close Proximity”

In the unrelated and pending IPR proceeding with Google, PO advances alternative constructions arguing that “[c]lose proximity is *within a several meter range*” and that “a POSITA would consider close proximity to be *10 meters or less*.” IPR2024-01322, Paper 17, 8 (PTAB, June 09, 2025).

Reply, 12 (citing *Google LLC v. DH International Ltd.*, IPR2024-01322, Paper 17, 7-8 (PTAB, June 09, 2025))

The regions of coverage 613A, 613B are generally of the order of tens or hundreds of feet, which is significantly smaller than the cells 601, 603 associated with the long range network. In this respect, it is particularly important to note that Fig. 5 is not drawn to scale.

Gorsuch, 12: 29-32



Gorsuch, Fig. 5 (annotated)