Petitioner's Oral Hearing Demonstratives

Apple Inc. (Petitioner)

v.

Varia Holdings LLC (Patent Owner)

IPR2024-01362 (U.S. Patent No. 8,381,974)
IPR2024-01363 (U.S. Patent No. 9,405,947)
IPR2024-01364 (U.S. Patent No. 8,127,984)

Before Hon. Kevin F. Turner, Norman H. Beamer, and Mary C. Hoffman

FISH.

DEMONSTRATIVE EXHIBIT - NOT EVIDENCE

IPR2024-01362 (974 IPR)*
IPR2024-01363 (947 IPR)
IPR2024-01364 (984 IPR)

* For simplicity, Petitioner's slides cite to the IPR2024-01362 record in addressing common topics relating to IPR2024-01362, IPR2024-01363, and IPR2024-01364

Topics of Discussion

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Topic 1: The "RFID" Elements (All IPRs)	**19**
The Independent Claims Are Not Limited to RFID Emulation	
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The Intrinsic Record Does Not Support Excluding A "Physical RFID Transponder" From Claim Scope	
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The "Voice Call Signal[s]" Element Is Not Limited To Wireless Network Service Provider Signals	
The Intrinsic Record Does Not Support Excluding Bluetooth Voice Communication Signals From Claim Scope	
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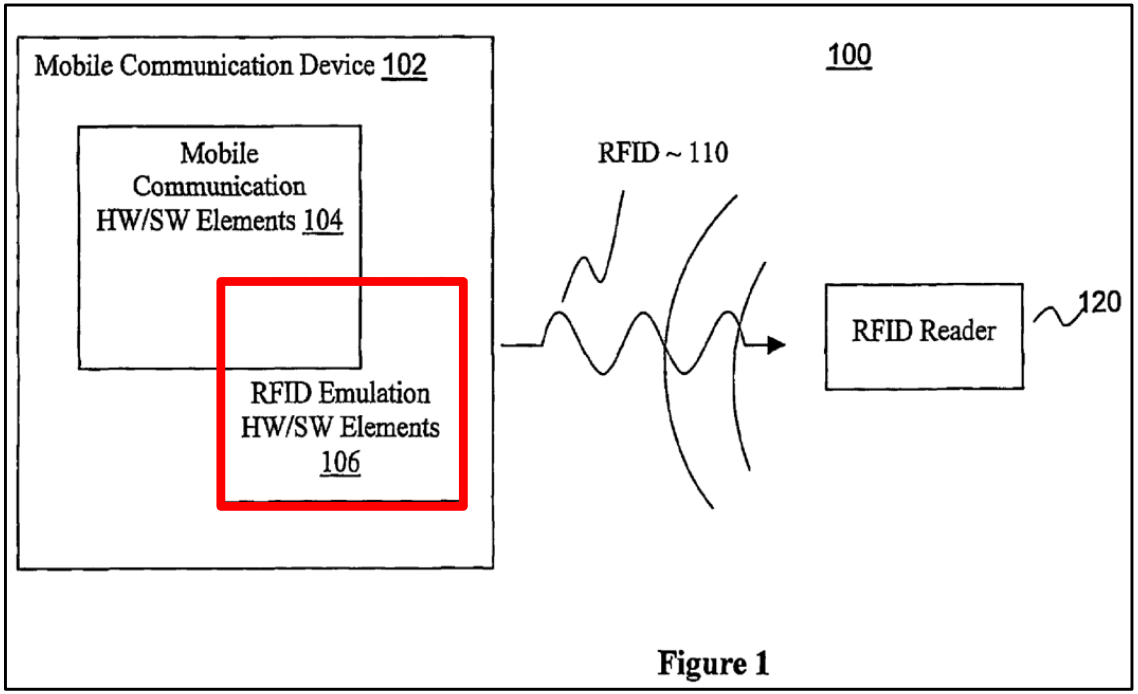
Subject Patent Disclosure

Specification – Figure 1



Ex. 1001, FIG. 1 (cited in Petition, 3)

Specification

…mobile communication device 102 is equipped with **hardware and/or software elements 106** to facilitate provision or transfer of a key/identifier in a form of a radio frequency signal 110, which may be read e.g. by a radio frequency identifier (RFID) reader 120.

Ex. 1001, 1:30-47 (cited in Petition, 70)

The "intersection" represents the fact that in preferred embodiments of the present invention, substantial portions of the hardware and/or software elements employed to provide a RFID, are the same elements employed to facilitate the primary function of device 102…

Ex. 1001, 1:48-55 (cited in Petition, 76)

Specification - Figure 2

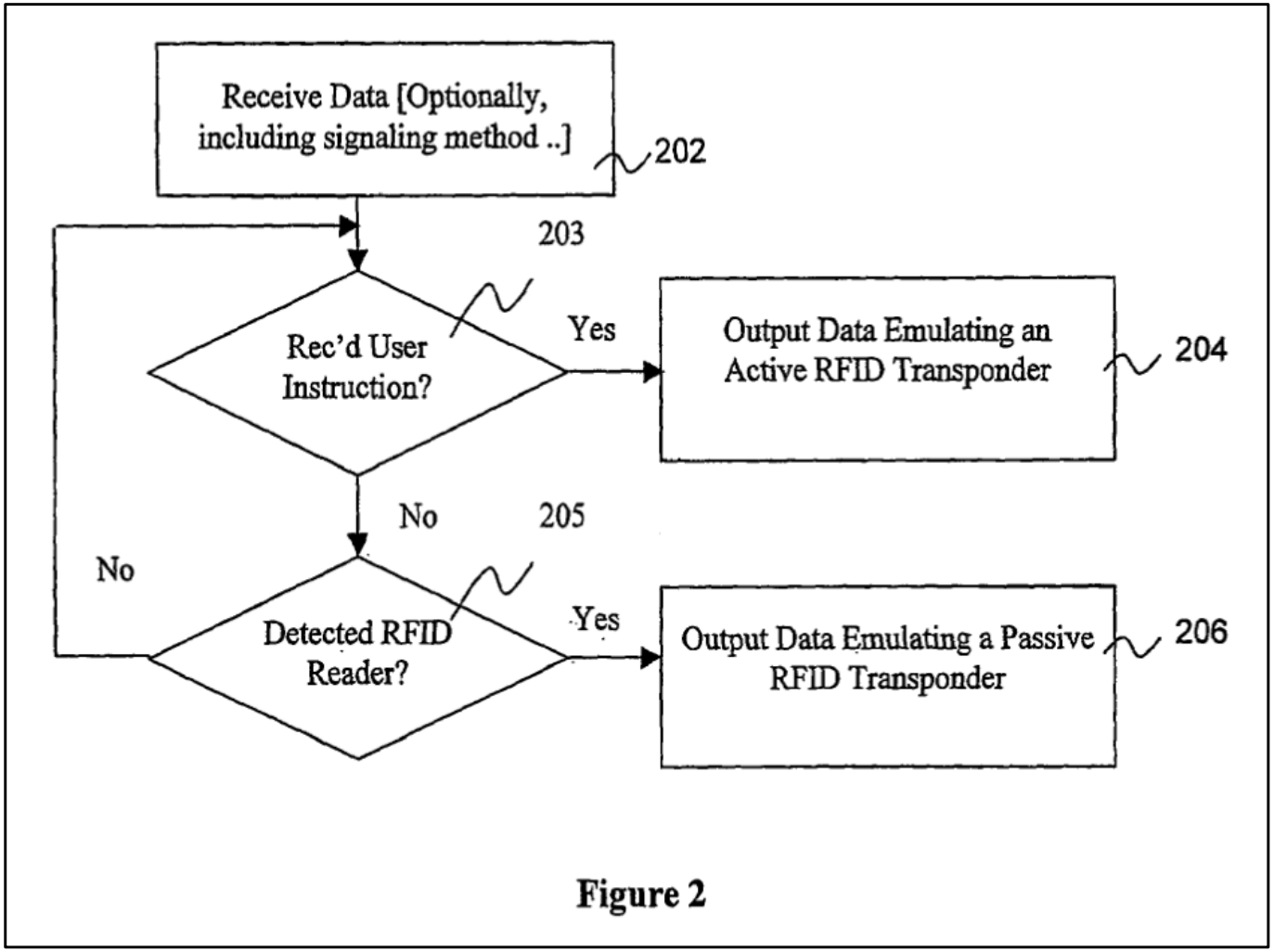


Figure 2

Ex.1001, Figure 2 (cited in 947 Institution Decision, 24)

Specification – Figure 4

POPR

Rather than use an RFID transponder, Varia's patent emulates a transponder by using **other electronic components such as a "transceiver" and/or "transmitter."**

POPR, 5

Specification

The **transceiver** of Figure 4 includes joint radio frequency (RF) transmit/receive (TX/RX) section 402, separate signal processing sections 408 and 410 for a range of higher frequencies and a range of low frequencies, switch 404,[] and splitter 406.

Institution Decision, 5 (citing Ex. 1001, 6:56-7:12)

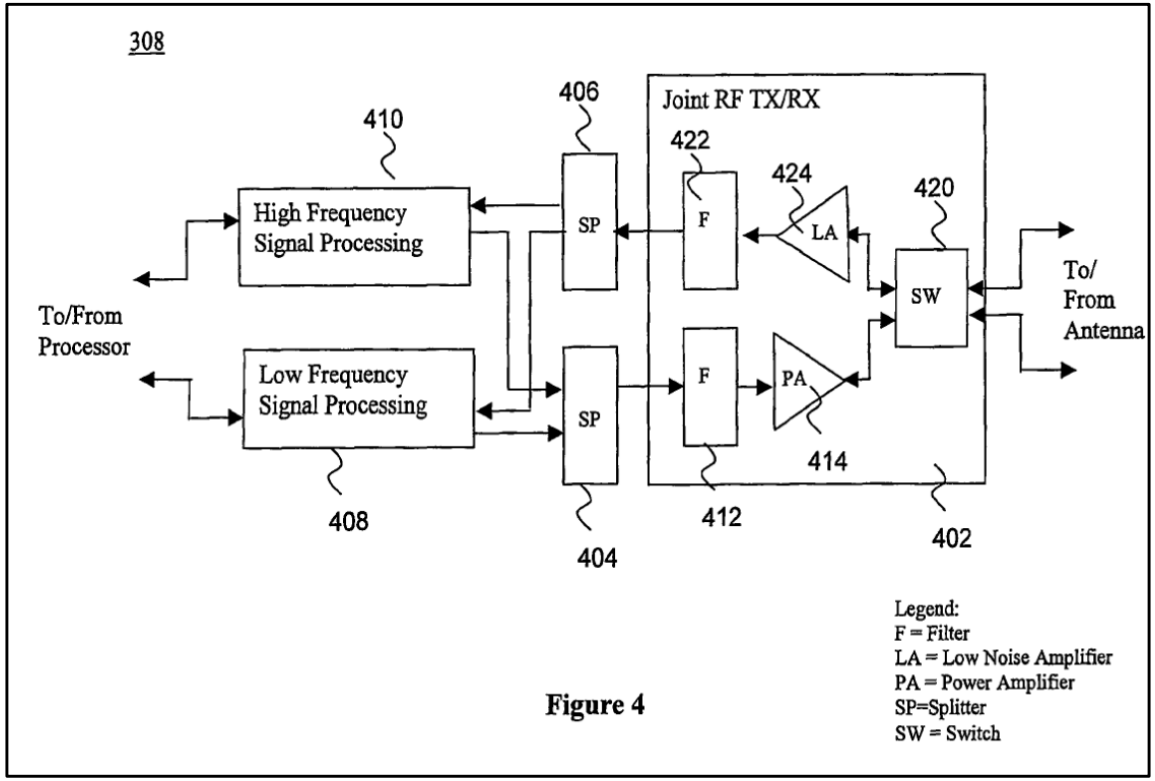


Figure 4

Ex.1001, Figure 4 (cited in Institution Decision, 5)

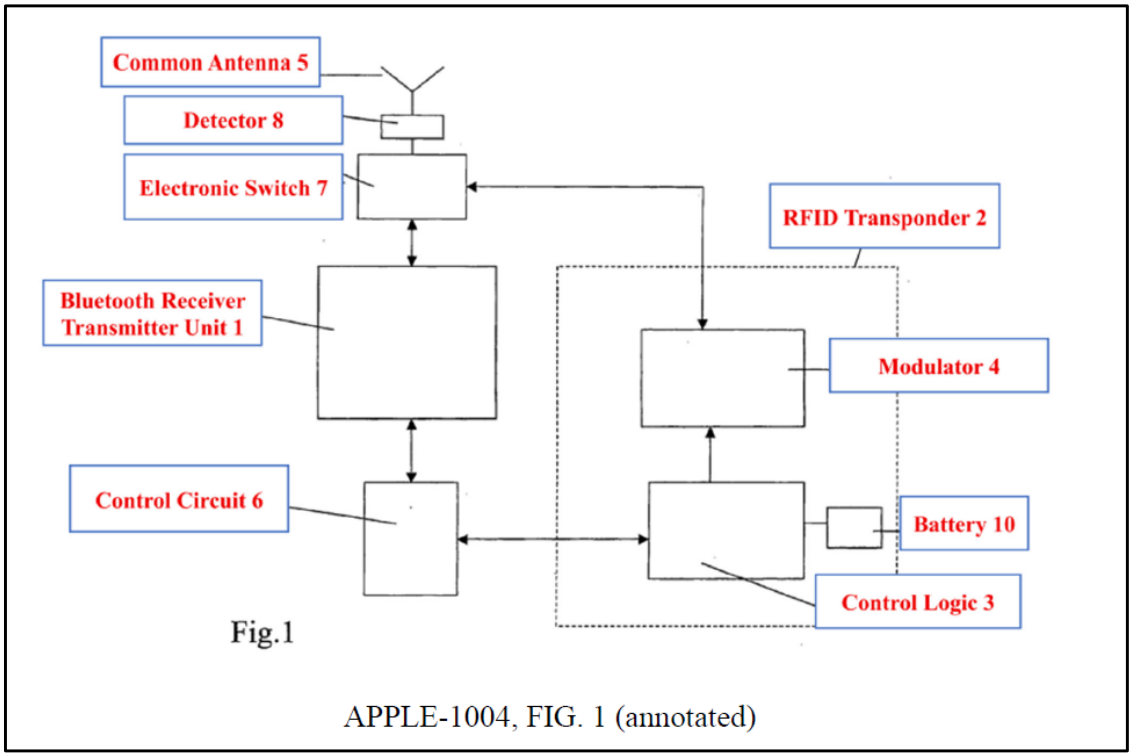
IPR Grounds

Overview of IPR Grounds

Claims Challenged	Prior Art
1-3, 5-9, 11-13, 16-18, 19 (974 IPR) 1, 2, 6-9, 13-17, 22, 23, 25, 26, 30-32 (947 IPR) 1-3, 7-14, 18-22, 27-33, 37-39 (984 IPR)	Willgert Mooney
1, 3, 5-9, 11 (974 IPR) 1, 2, 6-8 (947 IPR) 1, 3, 7-14, 18-20, 32, 33, 37-39 (984 IPR)	Willgert
3-6, 10, 11, 13-17 (974 IPR) 2-7, 10-14, 17-24, 27-31 (947 IPR) 3-9, 15-19, 22-28, 34-38 (984 IPR)	Willgert Mooney Holloway Pitroda

Overview of Prior Art

Willgert



APPLE-1004, FIG. 1 (annotated)

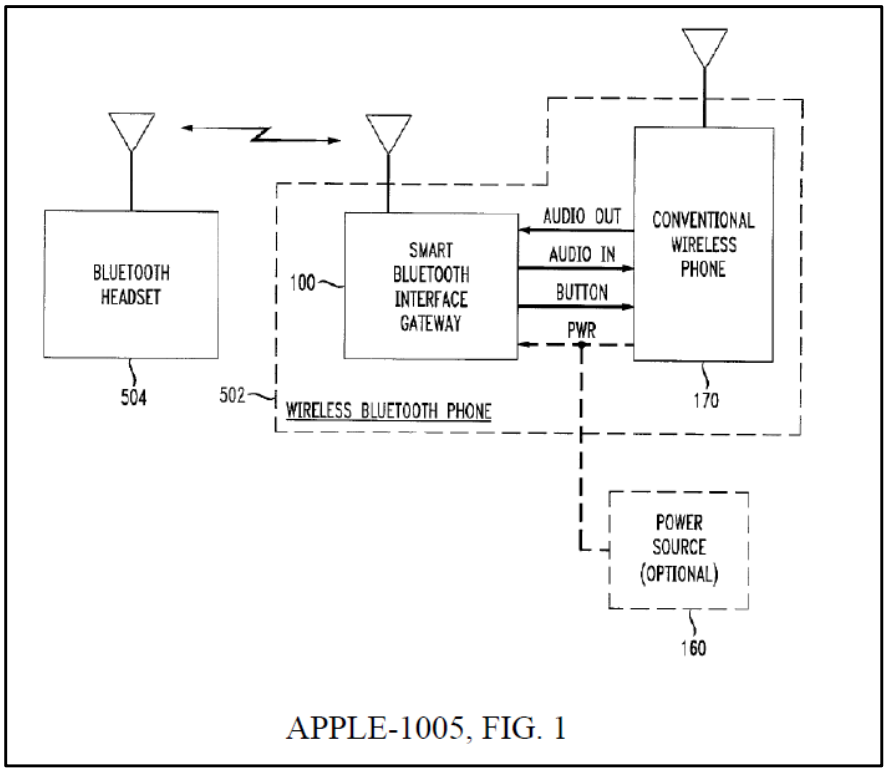
Petition, 11

Petition

The "communications unit" may be used for "identifying objects or persons," e.g., identifying a person uniquely associated with an identifier. APPLE- 1004, [0014]; APPLE-1003, ¶¶59-60. The "communications unit" includes "[Bluetooth] receiver/transmitter unit 1 in accordance with a Bluetooth system[,]" and "also includes a [RFID] transponder 2." Id.; APPLE-1003, ¶¶59-61.

Petition, 11

Mooney



APPLE-1005, FIG. 1

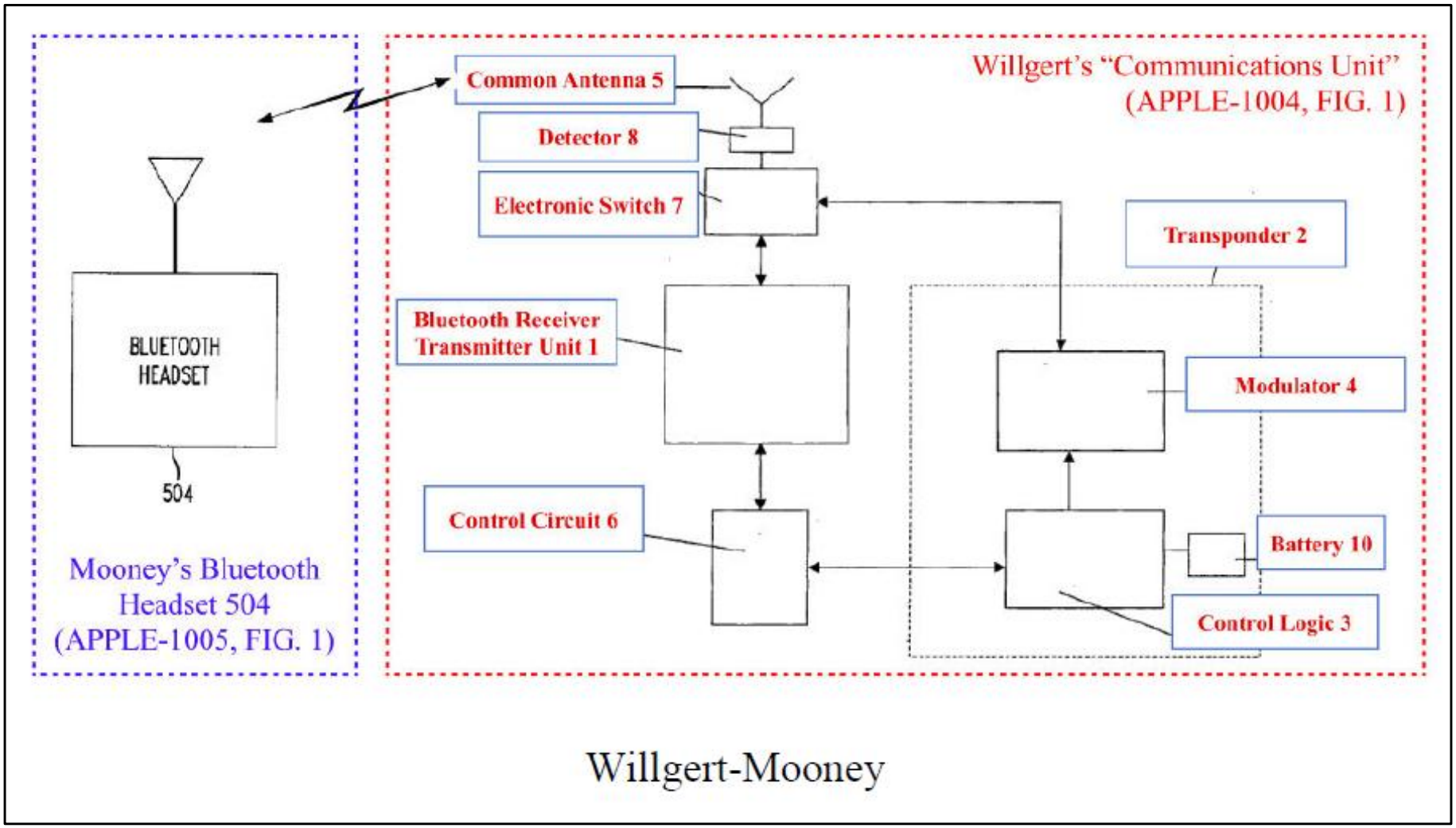
Petition, 13

Petition

The Bluetooth headset 504 is configured to "hear voice and/or tones…generated from the wireless phone []." Id., [0048]. Mooney also describes processes for answering phone calls using a Bluetooth headset. Id., [0033], [0047]-[0060], FIG. 3; APPLE-1003, ¶¶64-65.

Petition, 14

Willgert-Mooney



Petition, 16

Topics For Discussion

Topics for Discussion

Topic 1: "RFID" Elements (All IPRs)

Institution Decision

…there is **no reason** to confine the scope of the claims to the disclosed embodiments [that 'emulate' an RFID transponder]…

Institution Decision, 22

Topic 2: "Voice Call Signal[s]" Element (All IPRs)

We see **no reason** why the claimed "voice call signals" must be construed to exclude [Bluetooth] signals.

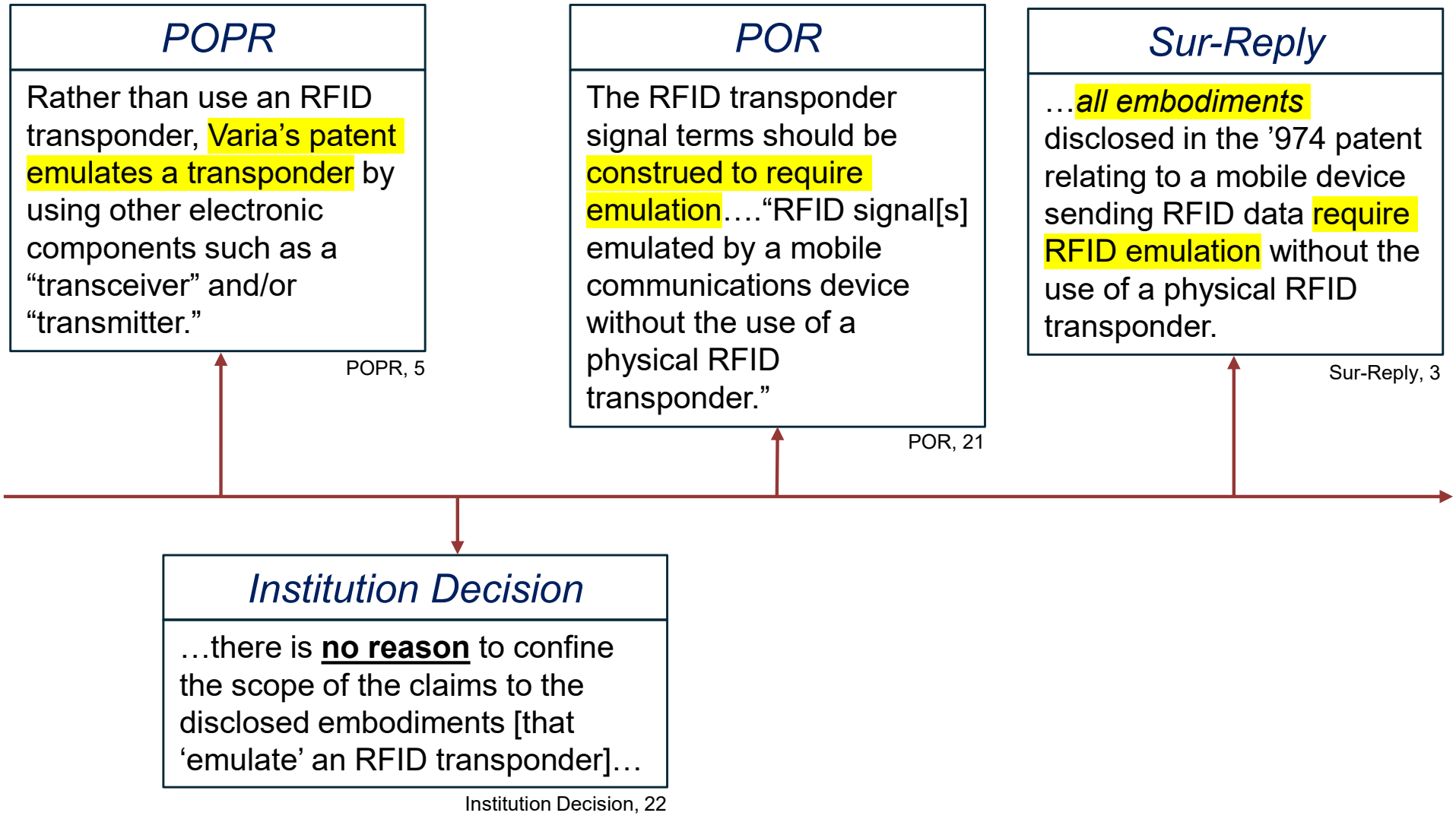
Institution Decision, 21

Topic 3: "Operational Space" Element (947 IPR)

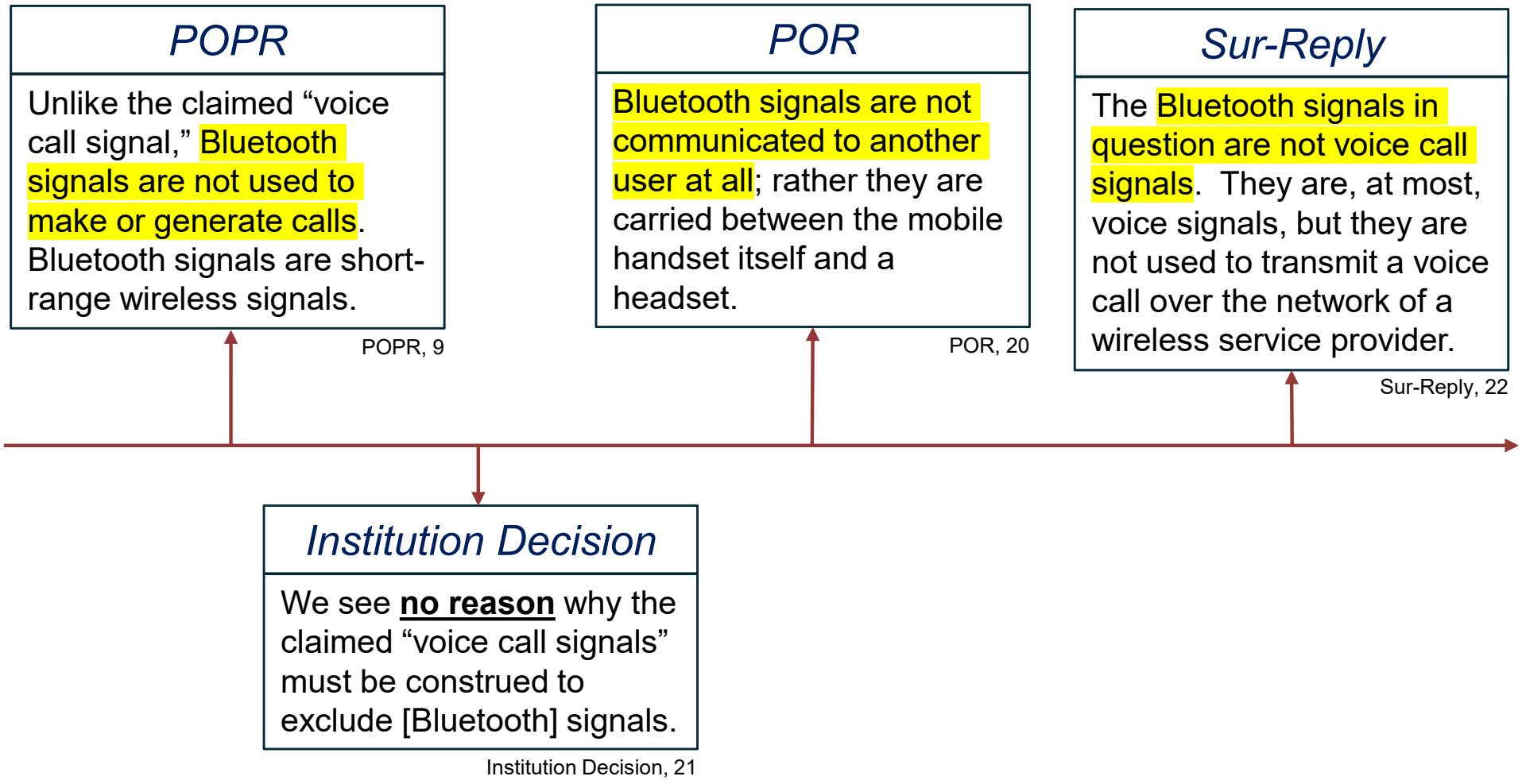
We see **no reason** why the fact that the Willgert transponder responds to the query signal of a RFID reader in proximity to the transponder does not satisfy the requirement of a mobile communications device determining that it is in the operational space of an RFID reader.

947 Institution Decision, 21

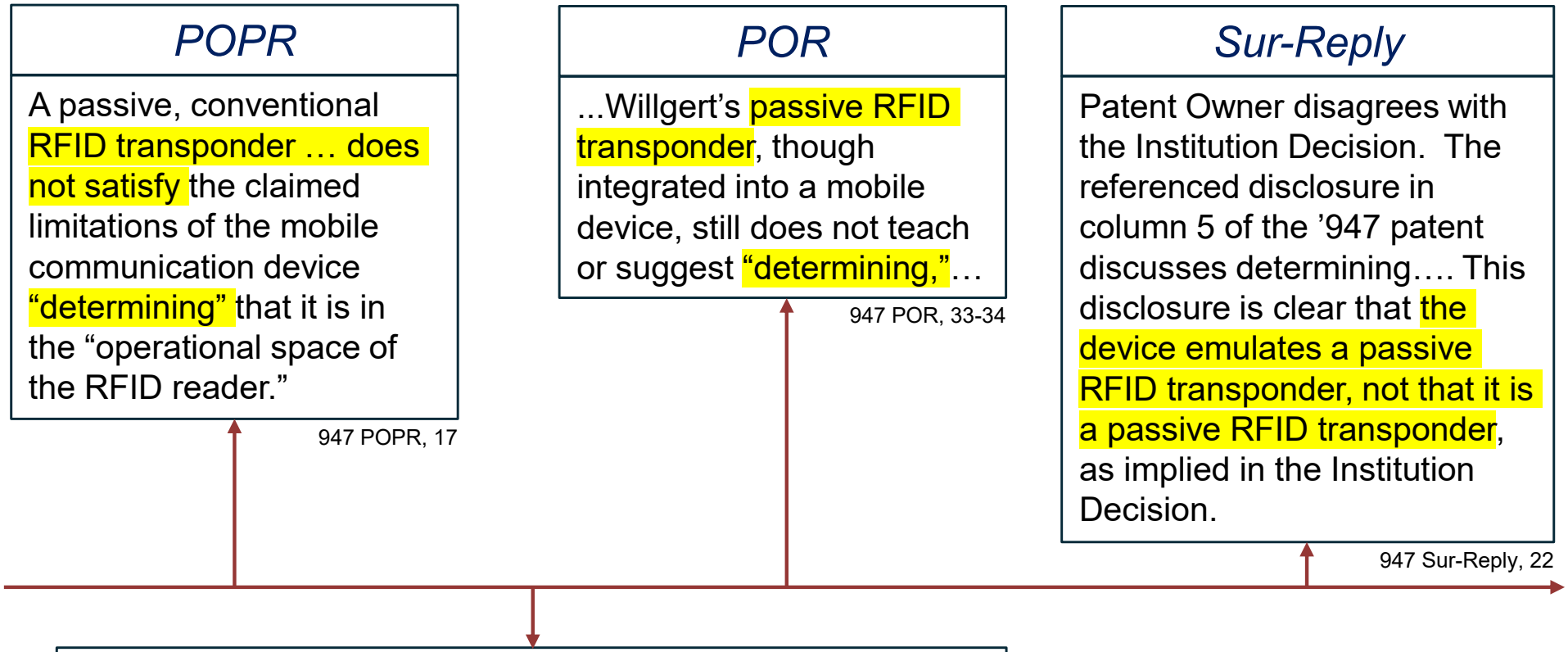
Topic 1: "RFID" Elements



Topic 2: "Voice Call Signal[s]" Element



Topic 3: "Operational Space" Element



Topic 1:
The Prior Art Satisfies the "RFID" Elements (All IPRs)

The Independent Claims Are Not Limited to RFID Emulation

The “RFID” Elements

Element	Relevant Claims
“RFID Transponder Signal[s]”	974 (claims 1, 12); 984 (claims 1, 21, 32)
“RFID Transponder Data”	974 (claims 6, 8); 984 (claims 9, 13)
“RFID Signal”	947 (claims 1, 2, 9, 16, 17, 26, 27)

The "RFID" Elements

Petitioner

Petition
No formal claim constructions are required in this proceeding.

Petition, 6

Reply
…[E]ncompass[es] "a potential 'used to convey information' using radio waves to achieve automatic identification of objects and people from one point to another."

Reply, 5; *see* Ex. 1063, ¶¶19-22

Patent Owner

POR
The RFID transponder signal terms should be construed to **require emulation**.

POR, 21

POR
…"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 21

PO's Construction Of "RFID" Elements

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20

Reply

…two distinct requirements:

(1) That RFID signals/data be "emulated" and

(2) [T]hat the RFID data/signal be generated "without the use of a physical RFID transponder."

Reply, 6

PO's Construction Of "RFID" Elements

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20

(1) "emulated by a mobile communications device"

Reply

None of the independent claims…use the term "emulate."

Reply, 7; *see also* 984 Reply, 7; 947 Reply, 6

Institution Decision

…there is **no reason** to confine the scope of the claims to the disclosed embodiments [that 'emulate' an RFID transponder]…

Institution Decision, 22

The Prosecution History Does Not Support Limiting Claim Scope to Emulation

984 File History

And while Zalewski teaches using a RFID transponder to output data, claim 1 recites an instruction to a component to output data "**emulating** an output of the first data by an active RFID transponder." Zalewski's RFID transponder is not a component that **emulates** an output by an active RFID transponder, being itself an RFID transponder.

Ex. 1008, 277 (cited in Reply, 12)

1. (Currently Amended) A method for providing a radio frequency identification (RFID) comprising:

receiving, by a mobile communications device, ~~facilitating a user in providing~~ an instruction to ~~a component of a mobile communication device to output~~ transmit a first data to a RFID reader;

switching a transceiver of the mobile communications device from a first state to a second state, the transceiver configured to output voice call signals in the first state and to output RFID signals in the second state

~~, said output emulating output of the first data by an RFID transponder of an active type, the component being also equipped to facilitate a user in communicating with a user of another communication device, with the communication being a voice call facilitated at least in part over a wireless network~~; and

~~in response to said providing an instruction,~~ outputting the first data by the ~~component~~ transceiver in the second state, the transceiver outputting the first data as~~in the form of~~ a radio frequency signal in a format~~, said outputting emulating output of the first data~~employed by [[an]]the RFID reader~~transponder of an active type~~.

Ex. 1008, 188

The Prosecution History Does Not Support Limiting Claim Scope to Emulation

947 File History

61. A method ~~for emulating radio frequency identification (RFID) signals from a mobile communication device~~ comprising:

receiving, by ~~the~~ a mobile communication device, from an RFID reader external to the mobile communication device, an RFID probing signal;

determining, by processing circuitry in the mobile communication device, whether the mobile communication device is in an operational space of the RFID reader based on the RFID probing signal; and

if the mobile communication device is in the operational space of the RFID reader, outputting, by the mobile communication device an RFID signal responsive to the RFID probing signal.

Ex. 1009, 224

The Claim Language Does Not Support PO's Construction Of "RFID" Elements

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20

Ding Declaration

…the claims of the '974 patent do not use the term "emulation" or the phrase "emulated RFID method."

Ex. 1003, ¶37 (fn 2) (cited in Petition, 3)

Ding Supplemental Declaration

…the act of "emulating" clearly provides only one of many ways of outputting by the transceiver of independent claim 1.

Ex. 1063, ¶29 (cited in Reply, 10)

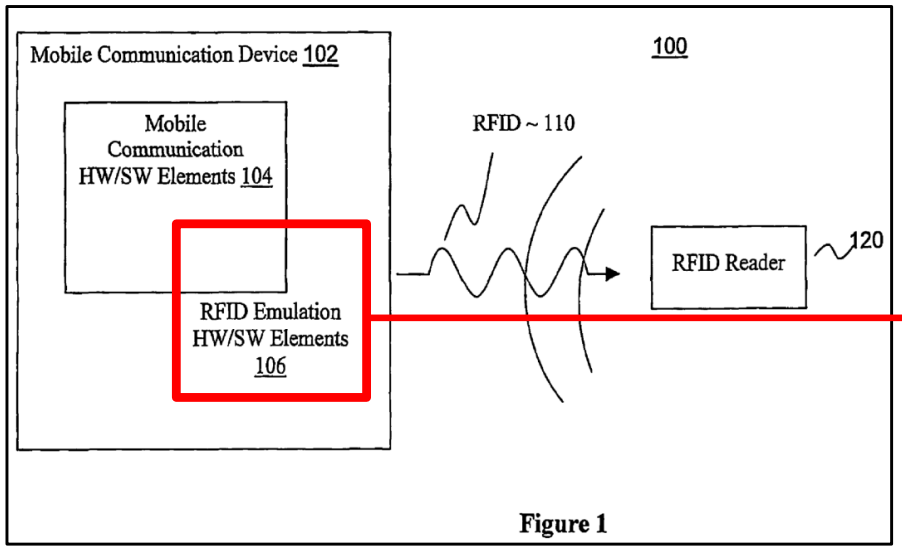
The Specification Does Not Support Limiting Claim Scope to Emulation

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20



Ex. 1001, FIG. 1 (cited in Petition, 3)

Specification

The "intersection" represents the fact that **in preferred embodiments** of the present invention, substantial portions of the hardware and/or software elements employed to provide a RFID, are the same elements employed to facilitate the primary function of device 102…

Ex. 1001, 1:48-55 (cited in Petition, 76)

“Transmitter”/“Transceiver” Elements

POPR

Rather than use an RFID transponder, Varia’s patent emulates a transponder by using **other electronic components such as a “transceiver” and/or “transmitter.”**

POPR, 5

Institution Decision

Again, Patent Owner is free to explore the scope of the claim terms “transceiver” and “transmitter” post-institution.

Institution Decision, 22

“Transmitter” and “Transceiver” are not terms proposed for construction by Patent Owner post-Institution

The Prior Art Satisfies "RFID" Elements Under Their Plain Meaning

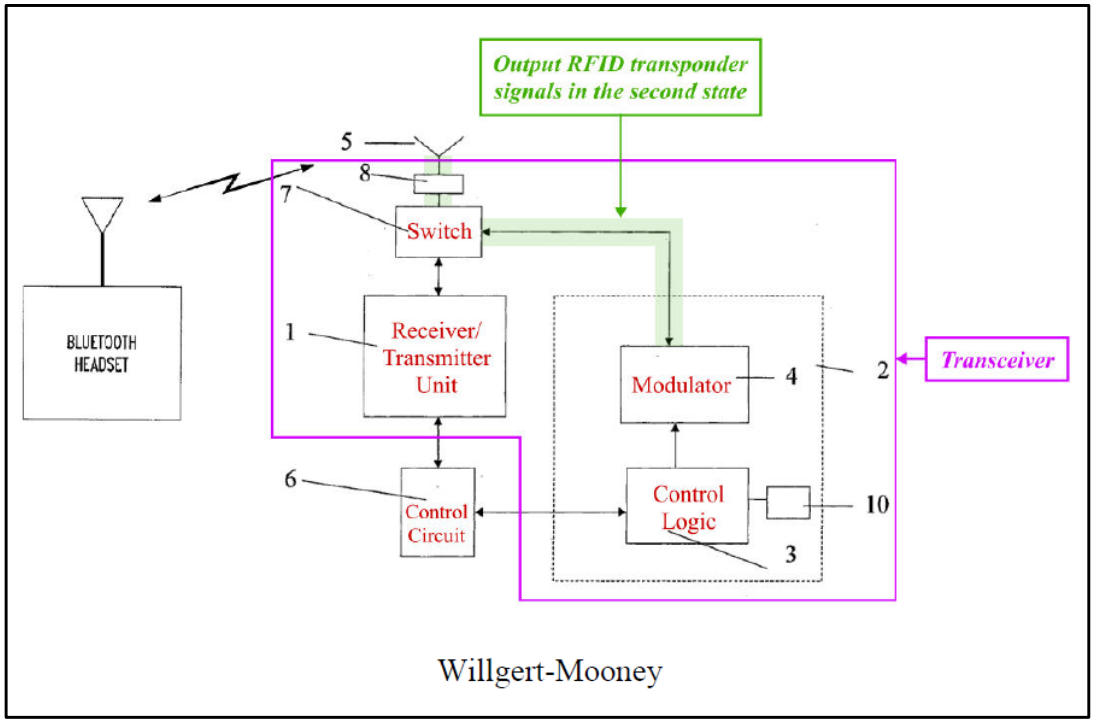
Willgert-Mooney Satisfies the "RFID" Elements Under Their Plain Meaning

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

Petition

The "communications unit" is configured to transmit (***output***) RFID signals (***RFID transponder signals***) to a communicator of an RFID system.

Petition, 26; *see* Ex. 1003, ¶115



Willgert-Mooney

Petition, 27

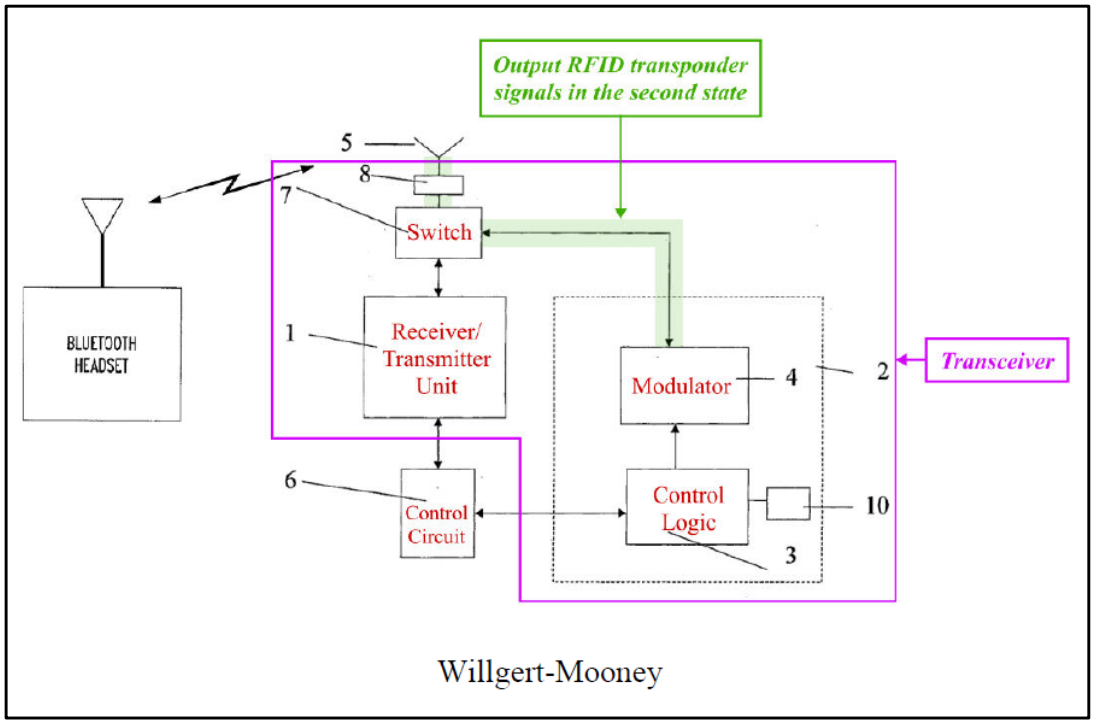
Willgert-Mooney Satisfies the "RFID" Elements Under Their Plain Meaning

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

Willgert

The present invention thus relates to an object or person identification communications unit…The transponder is integrated with the receiver/transmitter unit such as to **enable components associated with said receiver/transmitter unit to be <u>used also</u> for transponder operation**.

Ex. 1004, [0010] (cited in Petition, 30)



Willgert-Mooney

Petition, 27

Willgert-Mooney Satisfies the "RFID" Elements Under Their Plain Meaning

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

Willgert

The present invention thus relates to an object or person identification communications unit…The transponder is integrated with the receiver/transmitter unit such as to **enable components associated with said receiver/transmitter unit to be used also for transponder operation**.

Ex. 1004, [0010] (cited in Petition, 30)

Specification

The "intersection" represents the fact that in preferred embodiments of the present invention, **substantial portions of the hardware and/or software elements employed to provide a RFID, are the same elements employed to facilitate the primary function of device 102**…

Ex. 1001, 1:48-55 (cited in Petition, 76)

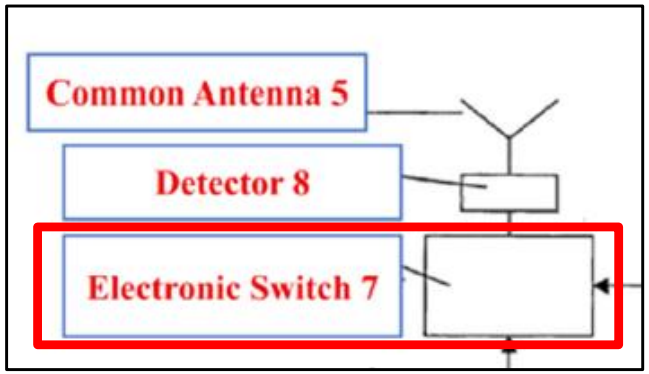
Willgert-Mooney Satisfies the "RFID" Elements Under Their Plain Meaning

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

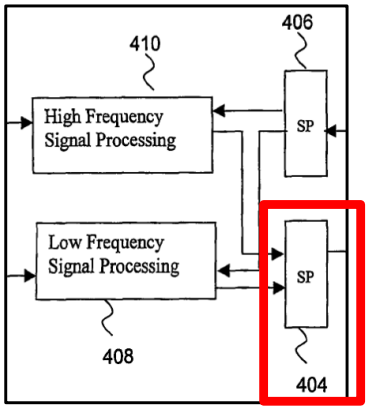
Petition

Like the switch 404 described in the '974 patent, switch 7 of Willgert-Mooney is configured to switch from one state (for transmitting voice call signals, via Bluetooth voice communication) to another state (for transmitting RFID signals)...

Petition, 20



Ex. 1004, FIG. 2 (cited in Petition, 20) (excerpt)



Ex.1001, Figure 4 (cited in Institution Decision, 5) (excerpt)

The Intrinsic Record Does Not Support Excluding A "Physical RFID Transponder" From Claim Scope

PO's Construction Of "RFID" Elements

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20

(2) "without the use of a physical RFID transponder"

Reply

But there is no language, either in the claims or in the specification, suggesting this negative limitation.

Reply, 8

Omega Engineering, Inc v. Raytek Corp.

Rejected construction because "neither the plain text of the claims, the specification, nor the file wrapper justifies the imposition of this negative limitation"

334 F. 3d 1314, 1333 (Fed. Cir. 2003) (cited in Reply, 8)

The Specification Does Not Support Excluding A "Physical RFID Transponder"

Ding Supplemental Declaration

Figure 4…reflects a generic architecture of components without specification as to the physical implementation.

Ex. 1063, ¶33 (cited in Reply, 10)

…physical components of an RFID transponder (e.g., antenna) are configured to transmit and receive RFID signals, making the collection of componentry in Figure 4 (including the antenna) both a "physical RFID transponder" and a transceiver

Ex. 1063, ¶33 (cited in Reply, 10)

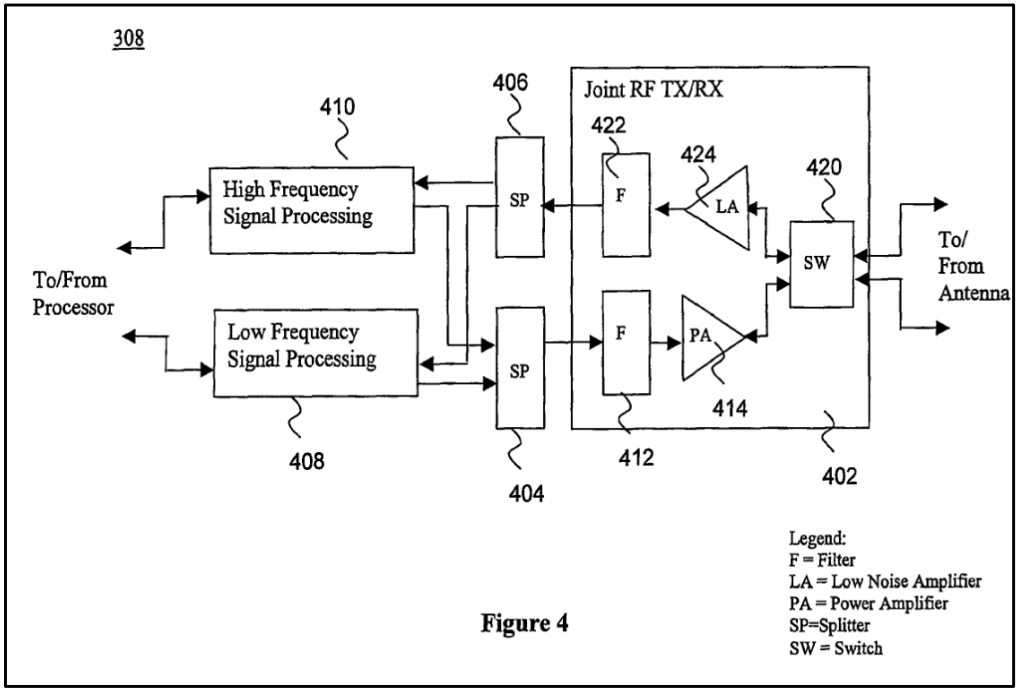


Figure 4

Ex.1001, Figure 4 (cited in Petition, 4)

The Prosecution History Does Not Support Excluding A "Physical RFID Transponder"

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

PO's Construction

"RFID signal[s] emulated by a mobile communications device without the use of a physical RFID transponder."

POR, 20

POR

…Patent Owner distinguished applied prior art (the Zalewski reference), which outputs RFID signals through a ***physical RFID transponder***, and therefore, failed to disclose an emulated RFID signal…

POR, 1 (emphasis in original)

984 File History

in communicating with a user of another mobile device. And while Zalewski teaches using a RFID transponder to output data, claim 1 recites an instruction to a component to output data "**emulating** an output of the first data by an active RFID transponder." Zalewski's RFID transponder is not a component that **emulates** an output by an active RFID transponder, being itself an RFID transponder. Thus, the cover/transponder of Zalewski neither emulates an output by an active RFID transponder nor facilitates a user in communicating with a user of another communication device over a wireless network.

Ex. 1008, 277 (cited in Reply, 12)

Topic 2:
The Prior Art Satisfies The "Voice Call Signal[s]" Element (All IPRs)

The “Voice Call Signal[s]” Element Is Not Limited To Wireless Network Service Provider Signals

Representative Claim 1 - 974 Patent

Claim 1	
[1.pre]	A method for providing a radio frequency identification (RFID) from a switchable mobile communications device capable of RFID communication and voice call communication, the method comprising:
[1.1]	receiving, by the mobile communications device, an instruction to transmit first RFID transponder data;
[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and
[1.3]	outputting the first RFID transponder data, by the transceiver as an RFID transponder signal.

The "Voice Call Signal[s]" Element

Petitioner

…encompass[es] "a potential 'used to convey information' relating to a telephone call established for the purpose of transmitting voice rather than data communications."

Reply, 14; *see* Ex. 1063, ¶24

Patent Owner

"transmit and receive signals of a voice call over a network of a wireless network service provider."

POR, 16

The Claim Language Does Not Support Limiting The "Voice Call Signal[s]" Element To Wireless Network Service Provider Signals

PO's Construction

"transmit and receive signals of a voice call over **a network of a wireless network service provider**."

POR, 16

974 Patent, Claim 1	
[1.pre]	A method for providing a radio frequency identification (RFID) from a switchable mobile communications device capable of RFID communication and voice call communication, the method comprising:
[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and

The Specification Does Not Support Limiting The "Voice Call Signal[s]" Element To Wireless Network Service Provider Signals

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and

PO's Construction

"transmit and receive signals of a voice call over a network of a wireless network service provider."

POR, 16

Specification

The term "wireless mobile phone" as used herein…refers to the class of telephony devices equipped to facilitate a user in communicating with another user of another communication device,…

Ex. 1001, 4:11-21 (cited in Reply, 16)

The term includes the analog as well as the digital subclasses. Communication may be **voice** and/or data, audio, textual, and/or visual.

Ex. 1001, 4:11-21 (cited in Reply, 16)

Institution Decision

…when the telephone is being used for its "primary purpose" of communicating with another user, the same voice call signal involved in that communication is also being transmitted from the telephone to the Bluetooth headset.

Institution Decision, 21

The Prosecution History Does Not Support Limiting The "Voice Call Signal[s]" Element To Wireless Network Service Provider Signals

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and

PO's Construction

"transmit and receive signals of a voice call over a network of a wireless network service provider."

POR, 16

984 File History

Appellant notes initially that Cooper at no point teaches or suggests that its headset utilizes the same hardware to transmit both Bluetooth and RFID data. As such, Cooper cannot teach or suggest a "transceiver configured to output voice call signals in the first state and to output RFID signals in the second state" as recited in claim 1. Indeed, at paragraph 0032, Cooper clearly describes that "RFID tag circuitry" can be *added* to a headset to allow the headset to communicate an RFID. This means that Cooper teaches the benefit of adding additional circuitry to achieve transmission of both voice data and RFID data. As such, Cooper clearly *teaches away* from the recited "transceiver configured to output voice call signals in the first state and to output RFID signals in the second state."

Ex. 1008, 39 (cited in Reply, 16)

The Prosecution History Does Not Support Limiting The "Voice Call Signal[s]" Element To Wireless Network Service Provider Signals

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and

PO's Construction

"transmit and receive signals of a voice call over a network of a wireless network service provider."

POR, 16

984 File History

For purposes of Examination, the Examiner has interpreted the first state as a voice state and the second state as when RFID is outputted. Alternatively, the Bluetooth could be the first state (secure connection) and the second state could be a subsequent RFID communication for a subsequent (separate communication attempt).

Ex. 1008, 66 (cited in Reply, 17)

The Intrinsic Record Does Not Support Excluding Bluetooth Voice Communication Signals From Claim Scope

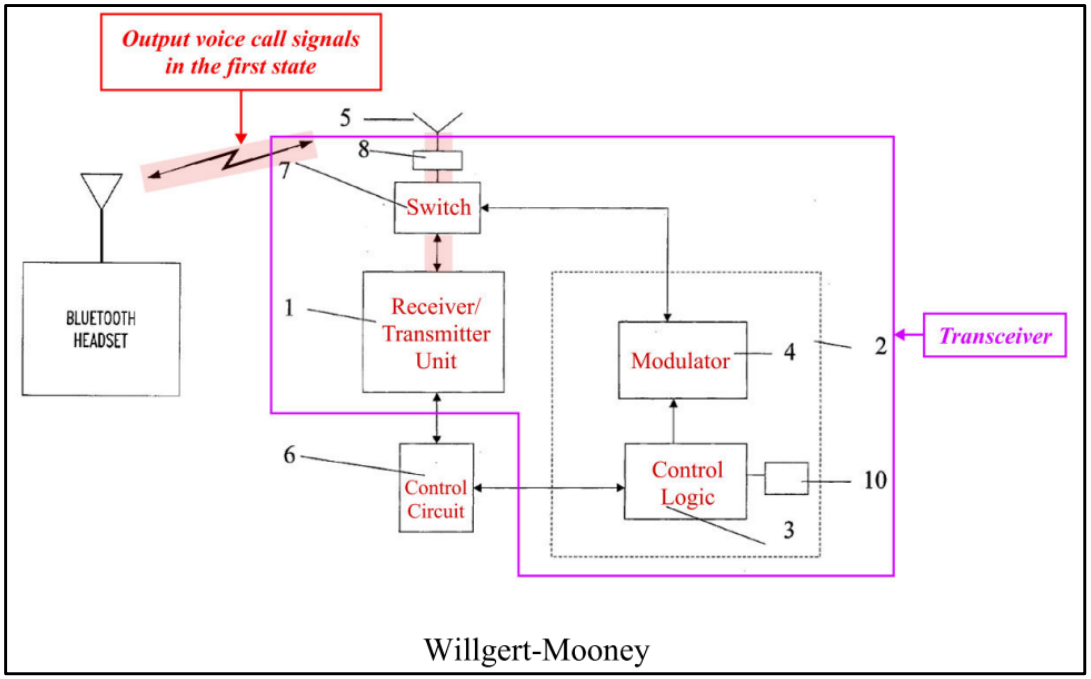
Willgert-Mooney Satisfies the "Voice Call Signal[s]" Element

[1.2]	switching a transceiver of the mobile communications device from a first state to a second state upon reception of said instruction, the transceiver configured to output voice call signals in the first state and to output RFID transponder signals in the second state; and

Willgert

According to the invention,
the transponder 2 is integrated with the receiver/transmitter unit 1 in such a manner as to enable components associated with the receiver/transmitter unit to be used also for operation of
the transponder 2, i.e., when the transponder receives a query signal and when it reflects and modulates said signal.

Ex. 1004, [0015] (cited in Petition, 33)



Willgert-Mooney

Petition, 26

Willgert-Mooney (Ground 1A)

Petition
As combined, Willgert-Mooney would have provided a system that includes a telephone (incorporating Willgert's "communications unit") and an associated Bluetooth headset that enables a user of the telephone to conveniently receive and respond to voice calls through use of the wireless headset.

Petition, 15-16

Mooney
In particular, as shown in FIG. 1, an otherwise conventional BLUETOOTH headset 504 is capable of communications with an otherwise conventional wireless phone 170 by adaptation of the wireless phone into a wireless BLUETOOTH phone 502 by the external connection of a smart BLUETOOTH interface gateway 100 in accordance with the principles of the present invention.

Ex. 1005, [0039] (cited in Petition, 15-16)

Willgert (Ground 1B)

Petition
…under Varia's interpretation, Willgert renders obvious certain scenarios where the "communications unit" (***transceiver***) is switch[ed] from a state of transmitting voice call signals (***first state***) to a state of transmitting RFID signals (***second state***) upon receiving a query signal from a RFID reader (***upon reception of [an] instruction to transmit [] RFID transponder data***).

Petition, 15-16

Willgert
In one highly user-friendly application, a transponder can also be included in a mobile telephone designed for Bluetooth communication.

Ex. 1004, [0030] (cited in Petition, 65)

Topic 3:
The “Operational Space” Element (947 IPR)

947 Patent – Claim 1

Claim 1	
[1.pre]	A method for operating a mobile communication device comprising:
[1.1]	receiving, by the mobile communication device, a radio frequency identification (RFID) probing signal from an RFID reader external to the mobile communication device;
[1.2]	executing, on processing circuitry in the mobile communication device, instructions stored in a memory in the mobile communication device,
[1.3]	the instructions configured to cause the mobile communication device to: output an RFID signal and output a voice call signal,
[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and
[1.5]	wherein the voice call signal is output over a wireless network and within a radio frequency range that is different than a radio frequency range used to output the RFID signal.

Willgert-Mooney Satisfies the "Operational Space" Element

[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and

Petition

…a determination by the Willgert-Mooney phone of being within a sufficient proximity to a communicator involves the phone being in the ***operational space*** of the communicator.

947 Petition, 31; *see* Ex. 1003, ¶¶94-95

Ding Declaration

For [a] transponder to communicate its stored information to the reader, it must be within the range of the electromagnetic field generated by the reader's signal. This configuration ensures that when the phone, which contains the RFID transponder, enters this specific area, it can receive the query signal, activate, and then respond with the required identification data.

Ex. 1003, ¶94 (cited in 947 Petition, 31)

Willgert-Mooney Satisfies the "Operational Space" Element

[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and

Willgert
The transponder is thus adapted to receive a query signal sent from a suitably known communicator, and therewith reflect the received signal while modulating the signal with a pulse train.

Ex. 1004, [0017] (cited in 947 Petition, 22)

Institution Decision
…we conclude this satisfies the claim requirement of "the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal."

947 Institution Decision, 23

Patent Owner Sur-Reply

[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and

Specification

…the selected/designated default RFID will be **outputted automatically**, whenever device **102** is within the proximal presence, or more specifically, the operational space, of an intended RFID reader **120**.

Ex. 1001, 5:1-4 (cited in 947 Institution Decision, 4)

Patent Owner Sur-Reply

[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and

Sur-Reply
…the device emulates a passive RFID transponder, not that it is a passive RFID transponder, as implied in the Institution Decision.

947 Sur-Reply, 22

Patent Owner Sur-Reply

[1.4]	wherein the RFID signal is output in response to the mobile communication device determining the mobile communication device is in an operational space of the RFID reader based upon receipt of the RFID probing signal, and

Sur-Reply
To the extent the Board needs to construe the determining step, Patent Owner requests that the Board do so. Patent Owner submits that this claim language requires more than an automatic RFID response, which is supported by the prosecution history.

947 Sur-Reply, 21

Appendix:
The Prior Art Satisfies Key Dependent Claim Features (All IPRs)

“Instruction[s]” to Switch Elements

[1.1]	receiving, by the mobile communications device, an instruction to transmit first RFID transponder data;

Petitioner

Petition

Upon receiving a signal, RFID transponder 2 “modulat[es] the signal with a pulse train” and “[i]nformation relating to the pulse train is stored in the memory.” *Id.* Further, “[t]he modulated signal may contain various types of information.” *Id*. Signal information thereby interacts with control logic 3 of the RFID transponder 2 to identify a signal type (read, write). *Id.* The information represents an ***instruction to*** the RFID transponder 2, e.g., to identify the type of signal prior to performing a responsive action. *Id*.

Petition, 24-25

Patent Owner

POR

Challenged Claims 1-3, 5-7, 12-13, and 16-19, as properly construed, require “instruction[s]” to switch a transceiver/transmitter to the second state/section to transmit an emulated RFID signal.

POR, 37

“Selection” to Switch Elements

[2]	The method of claim 1, wherein the RFID signal includes RFID data comprising a selected one of a security key and an identifier.

[3]	The method of claim 2, wherein the security key comprises a selected one of a garage door key, an exterior door key, an interior door key, and a motor vehicle door key.

Petitioner

Petition

By combining these features, a POSITA would have understood and found obvious that the features describing multiple RFID smart cards and ***the selection*** of those RFID smart cards in Holloway and Pitroda further enable Willgert’s transponder that already possess the ability to have RFID data “written into the transponder memory, so that said information can be read-out from the memory later on.”

Petition, 63 (citing Ex. 1004, [0018])

Patent Owner

POR

…POSITA would have understood that Willgert, alone or in combination with Mooney, does not disclose any selection to make the device send an emulated RFID signal without the physical presence of a transponder.

POR, 38

“Selection” to Switch Elements

[2]	The method of claim 1, wherein the RFID signal includes RFID data comprising a selected one of a security key and an identifier.

[3]	The method of claim 2, wherein the security key comprises a selected one of a garage door key, an exterior door key, an interior door key, and a motor vehicle door key.

Holloway
The memory within the telephone 10 maybe sub-divided into a number of mutually secure areas partitioned by firewalls. This makes it possible to allocate service providers with individual areas for their particular application. As a consequence it becomes possible to incorporate the functionality of a number of different cards within the one mobile telephone. This is a real benefit to the user since he no longer has to carry in his wallet a collection of cards that he may rarely use.

Ex. 1006, 11:11-18 (cited in Pet., 67)

"Emulating" RFID Output (Ground 1A)

[6.1]	The method of claim 1, wherein the method further comprises: monitoring for proximal presence of the RFID reader by the mobile communication device; and
[6.2]	on detection of the RFID reader by the mobile communication device, outputting, by the transceiver, second RFID transponder data as a second radio frequency signal, the outputting emulating output of the second RFID transponder data by an RFID transponder of a passive type.

Petition
…a POSITA would have understood and found obvious that the ***outputting*** of identity information ***emulate[s] output of the second RFID transponder data*** by the RFID transponder 2 (implemented as a passive RFID transponder) (***RFID transponder of a passive type***).

Petition, 41

Willgert
A design in which **Bluetooth and transponder are both integrated in a mobile telephone** enables, e.g., the transponder to be used for identifying a user of a computer, or some other equipment equipped with Bluetooth, for making use of Bluetooth communication possible.

Ex. 1004, [0032] (cited in Petition, 41)

"Emulating" RFID Output (Ground 2)

[6.1]	The method of claim 1, wherein the method further comprises: monitoring for proximal presence of the RFID reader by the mobile communication device; and
[6.2]	on detection of the RFID reader by the mobile communication device, outputting, by the transceiver, second RFID transponder data as a second radio frequency signal, the outputting emulating output of the second RFID transponder data by an RFID transponder of a passive type.

Petition

Signal output by the [Willgert-Mooney-Holloway-Pitroda] telephone emulates functionality of an RFID smart card and thereby ***emulates output*** of an RFID transponder associated with a smart card, including a passive RFID smart card (***RFID transponder of a passive type***).

Petition, 84

Holloway

Once the telephone has been loaded with money, the user is able to operate it for any payment application, just like with an RFID smart card. For example in a mass transit application, the user simply presents the telephone to the reader while passing through the gate or barrier. In doing so, the correct amount for the journey is automatically debited from the amount held in the owner's telephone.

Ex. 1006, 7:22-26 (cited in Petition, 84)