

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

DH INTERNATIONAL LTD.,

Patent Owner.

PTAB Case No. IPR2025-00172

Patent No. 9,022,294

**DECLARATION OF MR. SAFWAN ZAHEER
IN SUPPORT OF THE PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 9,022,294**

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b.	[1.b] “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;”	30
c.	[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”	34
d.	[1.d] “a second data transceiver operatively linked to said electronic 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 communication link;”	36
e.	[1.e] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from a source external to said cellular phone”	36

f.	[1.f] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being assigned a first state upon an activation cue assigned a second state when no activation cue was received by said cue receiver; and”	40
g.	[1.h.i] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if said switching element is in said first state, a first data conveyance operation will be initiated through the instrumentality of said first data transceiver for sending data from said electronic circuit to the first external data exchange device over said first communication link; and”	43
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b.	[10.b] “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 triggered by the user;”	54

c.	[10.d] “a first data transceiver operatively linked to said electronic circuit, said first data transceiver being operable for data exchange over a first communication link;”	54
d.	[10.e] “a second data transceiver operably linked to said electronic circuit, said second data transceiver being operable for data exchange over a second communication link that is distinct from said first communication link;”	54
e.	[10.f] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from a source external to said cellular phone; and”	55
f.	[10.h.i] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if an activation cue was received by said cue receiver, said electronic circuit will accomplish said first data conveyance operation to convey data from said electronic circuit to said first data transceiver for transmitting data through said first data transceiver; and”	55
g.	[10.h.ii] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if no activation cue was received by said cure receiver, said electronic circuit will accomplish said second data conveyance operation to convey data from said electronic circuit to said second data transceiver for transmitting data through said second data transceiver.”	55
12.	Independent claim 11	56
a.	[11.c.i] “an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;”	56

- b. [11.c.ii] “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;” 56
- c. [11c.iii] “a first data transceiver operatively linked to said electronic circuit, said first data transceiver being for exchanging data between said electronic circuit and said first data exchange device through a direct link;” 57
- d. [11(c)(iv)] “a second data transceiver operatively linked to said electronic circuit, said second data transceiver being for exchanging data between said electronic circuit and said second data exchange device through a communication network that is distinct from said direct link;” 57
- e. [11.c.v] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from said first data exchange device;” 58
- f. [11.c.vi] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being assigned a first state upon an activation cue having been received by said cue receiver, and being assigned a second state when no activation cue was received by said cue receiver; and” 58

- g. [11.c.viii.A] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if said switching element is in said first state, a first data conveyance operation will be initiated through the instrumentality of said first data transceiver for exchanging data between said electronic circuit and the first external data exchange device; and” 59
- h. [11(c)(viii)(B)] “if said switching element is in said second state, a second data conveyance operation will be initiated through the instrumentality of said second data transceiver for exchanging data between said electronic circuit and the second external data exchange device.” 59
- 13. Independent claim 12 60
 - a. [12.pre] “A method for data conveyance with a cellular phone of the type 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, first and second data transceivers operatively linked to said electronic circuit, a cue receiver operatively linked to said electronic circuit, a data conveyance switching element operatively linked to said electronic circuit and capable of being in either one of a first and a second state, and power means for providing power to said cellular phone, said method comprising the steps of:” 60
 - b. [12.a] “awaiting for an activation cue to be received at said cue receiver;” 60

- c. [12.b] “if an activation cue is received at said cue receiver, assigning said first state to said switching element, while if no activation cue is received at said cue receiver, assigning said second state to said switching element; and,” 61
 - d. [12.c] “a user selectively triggering said control device to issue an invariable activation command whereby: if said switching element is in said first state, forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device over a first communication link; and” 61
- Claim 13 – “A method as defined in claim 12, further comprising the following step before the step of forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device:.....62
- forwarding third data to and displaying said third data on a display screen provided on said cellular phone, wherein said third data is representative of the content of said first data.” 62
- 14. Claim 14 – “A method as defined in claim 13, wherein after the step of forwarding said third data to the display screen, the method comprises the following step: awaiting for an authorization command to be inputted through a user confirmation input device provided on said cellular phone before forwarding said first data to said first data transceiver.” 63
 - 15. Claim 15 – “A method as defined in claim 12, wherein said first and second data are identical.” 66

16.	Claim 16 – “A method as defined in claim 12, wherein said first data transceiver is a proximity transceiver and the step of forwarding said first data to said first transceiver is for initiating a wireless data exchange operation with a proximate first external data exchange device through a direct link representing said first communication link where the cellular phone is conveyed toward a close proximity of the first external data exchange device and within a range to receive the activation cue to initiate the wireless data exchange.”	67
17.	Claim 17 – “A method as defined in claim 12, wherein said second data transceiver is a communication network transceiver and the step of forwarding said second data to said second data transceiver is for initiating a wireless data conveyance operation through a communication network representing said second communication link, with one of a remote portable electronic device, a remote server, a remote terminal and a combination thereof.”	68
18.	Claim 18 – “A method as defined in claim 12, wherein the step of selectively triggering said control device to issue the invariable activation command comprises selectively triggering one of the manually activated button, the keypad for receiving a PIN code, the biometric parameter detector and a combination thereof.”	69
19.	Independent Claim 19	70

- a. [19.pre] “A method for data conveyance with a cellular phone of the type comprising: an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output, a control device operatively linked to said electronic circuit, first and second data transceivers operatively linked to said electronic circuit, a cue receiver operatively linked to said electronic circuit, a data conveyance switching element operatively linked to said electronic circuit and capable of being in either one of a first and a second state, and power means for providing power to said cellular phone, said method comprising the steps of:” 70
- b. [19.a] “awaiting for an activation cue to be received at said cue receiver;” 70
- c. [19.b] “if an activation cue is received at said cue receiver, assigning said first state to said switching element, while if no activation cue is received at said cue receiver, assigning said second state to said switching element; and” 71
- d. [19.c, 19.c.i, 19.c.ii] “selectively triggering said control device to issue an invariable activation command whereby: if said switching element is in said first state, forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device over a first communication link; and if said switching element is in said second state, forwarding second data to said second data transceiver for initiating a data exchange operation with a second external data exchange device over a second communication link that is distinct from said first communication link;” 71
- e. [19.d.i] “wherein said method further comprises the following steps before the step of forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device:” 72

f.	[19.d.ii] “forwarding third data to and displaying said third data on a display screen provided on said cellular phone, wherein said third data is representative of the content of said first data; and”	72
g.	[19.e.ii] “awaiting for an authorization command to be inputted through said user confirmation input device before forwarding said second data to said second data transceiver.”	73
20.	Claim 20 – “wherein said control device includes said user confirmation input device.”	73

TABLE OF DECLARATION EXHIBITS AND APPENDIX

Exhibit	Title
1001	U.S. Patent No. 9,022,294 to Gaillard <i>et al.</i> (“294 Patent”)
1002	U.S. App. No. 10/552,912 (issued as U.S. 7,628,333) (“Parent Application”)
1003	Prosecution History of U.S. Patent No. 9,022,294
1004	Declaration of Michael Buehrer (“ <i>Buehrer</i> ”)
1005	Japanese Patent No. 2003110751 to Suga (“ <i>Suga</i> ”)
1006	International Patent Application Publication No. WO 2001/22662 to Gorsuch (“ <i>Gorsuch</i> ”)
1007	U.S. Patent No. 8,792,454 to Taniuchi <i>et al.</i> (“ <i>Taniuchi</i> ”)
1008	U.S. Patent No. 8,165,559 to Klesper <i>et al.</i> (“ <i>Klesper</i> ”)
1009	Nokia Corporation, Nokia 6136 User Guide, 9252766 Issue 2, copyright 2007 (“ <i>Nokia 6136</i> ”)
1010	U.S. Patent Publication No. 2007/0277120 to Wilson <i>et al.</i> (“ <i>Wilson</i> ”)
1011	Feng Zhang, Vertical Handoff Between 3G Networks and WLANS, copyright 2005 (“ <i>Zhang</i> ”)
1012	Al Sacco, The Eight Hottest Smartphones of 2008, computerworld.com, https://www.computerworld.com/article/1367892/the-eighthottest-smartphones-of-2008.html (“ <i>Sacco</i> ”)
1013	U.S. Patent No. 7,660,854 to Sorotzkin (“ <i>Sorotzkin</i> ”)

DECLARATION OF SAFWAN ZAHEER
IN OPPOSITION TO PETITION FOR
IPR2025-00172, U.S. PATENT NO. 9,022,294

1014	U.S. Patent No. 6,671,718 to Meister <i>et al.</i> (“Meister”)
1015	<i>Pending litigation Stipulation (not listed in Declaration)</i>
1016	Nokia N93 User Guide (“Nokia N93”)
2001	Declaration of Safwan Zaheer (“Zaheer”)
2002	Prosecution History of U.S. Application No. 10/552,912, U.S. Patent No. 7,628,333
2003	Litigation Tolling Agreement

Appendix Curriculum Vitae of Safwan Zaheer

I, Mr. Safwan Zaheer, declare as follows:

I. INTRODUCTION

1. I am consulting and, most recently, at autoMHatic Financial, a private equity-backed specialty lender focused on manufactured home loans. I have over twelve years of experience with the digital transformation of financial companies, such as FinTech and product development. As Chief Product Officer, I lead Product, Operations, and Technology responsible to accelerate the lending business, build operating efficiency, and increase competitive advantage through products that expand market share and increase company valuation. I have previously served as EVP & GM at LendingPoint where I was tapped to scale POS Lending and Payments business across Dental, Elective Medical, and Home Improvement verticals, which I grew from \$90M to over \$350M in funded volume per year during my tenure. Previously, as Head of Products at BM Technologies (formerly BankMobile), I launched and scaled T-Mobile MONEY, growing the digital banking platform to 500K consumers. In my former role at autoMHatic Financial, I drove business transformation in the specialty lending space, focusing on digital solutions and growth.

2. My career also included key leadership positions at KPMG, Accenture, and Barclays, where I spearheaded major digital banking and payments initiatives.

At KPMG, I provided strategic vision for KPMG's U.S. FinTech service line and performed effectively as an active member of the Global FinTech leadership team. I served many clients, including Global Banks, and was involved in a variety of different strategic initiatives ranging from Digital Transformation to launching innovative Payments, Lending and FinTech solutions. Throughout my career, I have excelled in building high-performance teams, forging strategic partnerships, and delivering transformative solutions across the financial services industry. I have also been named as an inventor in three patent applications. Two are in the field of mobile payments wallet systems, and one is in CDMA wireless systems.

3. I have been hired by DH International Ltd. ("DH International" or "Patent Owner") to investigate and opine on certain issues relating to U.S. Patent No. 9,022,294 to Joel Gaillard (Ex. 1001, the "'294 Patent").

4. I understand that the '294 Patent was assigned to DH International.

5. I am over 21 years of age. If I am called upon to do so, I would be competent to testify as the matters set forth in my Declaration.

6. In this Declaration, I discuss the technology related to the '294 Patent, including an overview of that technology as it was known at the time of the earliest priority date claimed by the '294 Patent, April 14, 2003. This overview of the

technology provides some of the bases for my opinions with respect to the '294 Patent.

7. This Declaration is based on the information currently available to me. To the extent that additional information becomes available, I reserve the right to continue my investigation and study.

8. In forming my opinions, I have relied on information and evidence identified in this Declaration, including without limitation the '294 Patent (Ex. 1001), the prosecution history of the '294 Patent (Exh. 1003), and prior art including:

9. Japanese Patent No. 2003110751, "Portable Information Device and Line Switching Method" (Exh. 1005) ("*Suga*").

10. International Patent Application Publication No. WO 2001/22662, "Dual Mode Subscriber Unit for Short Range, High Rate and Long Range, Lower Rate Data Communications" (Exh. 1006) ("*Gorsuch*").

II. SUMMARY OF OPINIONS

11. The challenged claims 1-20 ("Challenged Claims") of the '294 Patent generally describe an approach for "a portable electronic device capable of alternate data conveyance operations responsive to an invariable activation command." Exh. 1001, 1:16-18.

12. It is my opinion that each of the Challenged Claims of the '294 Patent can be distinguished from *Suga* in combination with *Gorsuch* as asserted in ground 1 of the Petition and hence are not obvious under 35 U.S.C. § 103(a) as I understand obviousness because not all elements of the '294 Patent are found in the references.

III. QUALIFICATIONS AND EXPERIENCE

A. Education and Work Experience

13. I have a Master of Science in Engineering and Management from Massachusetts Institute of Technology (MIT), a Master of Science and a Bachelor of Science in Electrical Engineering from Texas A & M. Additional details regarding my education, work experience, and technical consulting experience are set forth in my CV, attached as Exhibit A.

14. I have extensive experience with financial services and payment systems. I developed and designed payments wallet for Barclays U.S. from 2012 to 2015 as the Director of Digital Payment Products. I have also worked for Accenture and then KPMG between 2015-2019. I was responsible for product development services for financial services, technology, and retail clients, in addition to KPMG's FinTech service line, as a member of KPMG's Global FinTech Leadership team. After KPMG, I was a Managing Director for hundredX, LLC from 2019-2023,

where I was responsible for providing professional services to a number of clients, including Financial Services and Payments companies.

15. From 2024 to the present, I have worked at autoMHatic Financial as its Chief Operating Officer and Chief Product Officer on digital transformation of the business, along with implementing artificial intelligence and digital automation across operations and products.

16. I am a co-inventor of U.S. patent application No. 13/647,997, “Mobile Wallet System,” filed on October 9, 2012; U.S. patent application No. 13/725,061, “Mobile Commerce Business System and Method for Sharing Merchant Content and Creating a Customer Index,” filed on December 21, 2012; and U.S. patent 7,200,115, “Method of Managing Non-acknowledgement Responses,” filed on May 17, 2002.

17. Because of my background, training, and experience, I am qualified as an expert to explain the background of the technology encompassed by the '294 Patent as well as the meaning that the claim terms of the '294 Patent discussed herein would have had to a person of ordinary skill in the art in 2003 reading the claims in light of the specification and file history.

18. I have reviewed '294 Patent and its prosecution history. I have also reviewed the documents cited in the Petition.

B. Compensation

19. DH International is compensating me for services I am providing in connection with this Petition for *inter partes* review of the '294 Patent at a rate of \$675.00 per hour. The compensation is not contingent upon my performance, the outcome of the *inter partes* review or any other proceeding, or any issues involved in or related to the *inter partes* review.

C. Documents and Other Materials Relied Upon

20. The documents on which I rely for the opinions expressed in this Declaration are documents and materials identified in this Declaration, including the '294 Patent, the prosecution history of the '294 Patent, the prior art references and information discussed in this Declaration, and any other references identified explicitly in this Declaration or the Petition (Paper 1), in their entirety, even if only portions of these documents are discussed here in an exemplary fashion.

IV. STATEMENT OF LEGAL PRINCIPLES

21. Patent Owner's counsel has advised me of the following legal principles:

A. Claim Construction

22. Patent Owner's counsel has advised me that the words of a claim are generally given their ordinary and customary meaning in view of the specification,

as it would have been understood by a person of ordinary skill in the art (POSITA) at the time of the invention.

B. Obviousness

23. Patent Owner's counsel has also advised me that obviousness under pre-AIA 35 U.S.C. § 103, effective before March 16, 2013, is a basis for invalidity. I understand that where a prior art reference discloses less than all of the limitations of a given patent claim, that patent claim is invalid if the differences between the claimed subject matter and the prior art reference are such that the claimed subject matter as a whole would have been obvious at the time the invention was made to one of skill in the art. Obviousness can be based on a single prior art reference or a combination of references that disclose all limitations of the claimed invention.

24. I understand that obviousness is not driven by a rigid formula, but is a flexible inquiry that reflects the fact that one of skill in the art exercising ordinary creativity may find a variety of reasons to combine the teachings of different references. I understand that a non-exclusive list of possible factors that may give one of skill in the art a reason to combine references includes any of the following: combining elements according to known methods to yield predictable results; simple substitution of known elements to obtain predictable results; use of known techniques to improve similar devices in the same way; applying known techniques

to known devices ready for improvement to yield predictable results; choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; known work in one field of endeavor prompting variations of it for use in the same field; and teaching in the prior art that would have led one of ordinary skill to combine prior art reference teachings to arrive at the claimed invention.

C. Dependent Claims

25. Patent Owner's counsel has further advised me that dependent claims include all the elements from the claims on which they depend.

V. LEVEL OF ORDINARY SKILL IN THE ART

26. I understand from Patent Owner's counsel that the claims and specification of a patent must be read and construed through the eyes of one of skill in the art at the time of the priority date of the claims. I have also been advised that to determine the appropriate level of skill, the following factors may be considered: (a) the types of problems encountered by those working in the field and prior art solutions to it; (b) the sophistication of the technology in question, and the rapidity with which innovations occur in the field; (c) the educational level of active workers in the field; and (d) the educational level of the inventor.

27. The Abstract of the '294 Patent acknowledges that the alleged invention is an approach for "data conveyance includes awaiting for an activation cue to be

received at the cue receiver; if an activation cue is received at the cue receiver, assigning its first state to the switching element, while if no activation cue is received at the cue receiver, assigning its second state to the switching element; and selectively triggering the control device to issue an invariable activation command.”

Ex. 1001, Abstract.

28. Therefore, in my opinion, a person of ordinary skill in the art would have some familiarity with underlying technologies involving devices that utilize a transmitter and receiver for transmitting and receiving data between devices over a network with a processor. For example, a person of ordinary skill in the art would need to know how to utilize electrical components of the system but would not necessarily need to be an expert on the design of processor-controlled devices. A POSITA would need to know how configurations for transmitting and receiving information between a portable device and terminal are created and implemented and how to access data on the portable device.

29. Based on my education and experience, I am familiar with the level of knowledge that a person of ordinary skill would have possessed during the relevant time. In my opinion, one of skill in the art for the claimed technology would have a bachelor’s degree in electrical engineering or a similar discipline and at least two years of relevant industry or research experience in wireless communication between

devices. This definition is approximate, and more education may substitute for industry experience or vice versa.

VI. BACKGROUND OF THE TECHNOLOGY AND OF THE '294 PATENT

A. Technology at the Time of the '294 Patent

30. I have been asked to provide some context to the technology related to the '294 Patent and the prior art. I understand that the relevant time frame is April 14, 2003, and below, I provide background on how the various technologies were developed and operating up to that time frame.

31. The use of devices such as electronic cards for security was known at the time of the '294 Patent. However, what was not known was the added security that both the validation/authentication of a user and “an activation cue” used to enable switching with a switching element between data on the electronic card.

32. The '294 Patent teaches and claims an approach for securely transferring data between devices (either connected to a network or with a direct link).

33. During the prosecution of the parent patent application (U.S. Patent Application No. 10/552,912), Exh. 1001, 1:9-10, of which the '294 Patent is a continuation-in-part of the parent application, and the applicant stated:

Thus, the contact switch 24 of the card of document D1 has the effect of only activating the read mode portion of the card, and has a quite different function than the control device claimed in the present patent application, which must necessarily be triggered to initiate any data flow towards or out of the electronic circuit.

Exh. 2002, p.218-219. No data flow towards or out of the electronic circuit occurs without activation.

34. Once the portable electronic device is activated, a first set of data is accessible in an inactive state. *See* Exh. 1001, 9:49. Upon the control device receiving the “activation cue,” the data accessible is switched to a second set of data by the switching element. *See Id.*, 9:28-30.

35. The “activation cue” is a predetermined indication for switching what data will be accessed. It is an indicator, “for example, a predetermined bit sequence.” *Id.*, 9:24-27.

B. Challenged Claims

36. Petitioner challenged claims 1-20 of the '294 Patent. *See* Pet. 28. Claims 1, 10, 11, 12, and 19 are independent. Claims 2-9 and 12-13 depend from claims 1 and 11, respectively. Exh. 1001, 9:61-13:27.

C. Priority Date

37. The '294 Patent was granted as a continuation-in-part of U.S. Patent Application No. 10/552,912, filed on February 27, 2006, that claims priority to PCT application No. PCT/IB03/01523, filed on April 14, 2003. Exh. 1001, 1:9-12. Counsel has informed me that the prior art references cited in Ground 1 in the Petition are prior art to the '294 Patent based on the April 14, 2003, priority date. If evidence in this proceeding of an earlier invention date is uncovered, I reserve the right to offer additional opinions and testimony to respond to such evidence.

D. Identification of the Prior Art and Summary of Opinions

38. As explained below, it is my opinion that the following prior art references, and in the combinations provided by Petitioner, fail to disclose all technical features of the Challenged Claims of the '294 Patent, and the Petition fails to describe all of the claim elements of the '294 Patent:

- Exh. 1005 *Suga*
- Exh. 1006 *Gorsuch*

1. Suga

39. Japanese Patent No. 2003110751 ("*Suga*") (Exh. 1005) was filed on October 1, 2001, and published on April 11, 2003. It is noted that the actual English document has a date of July 29, 2024 (*see* Exh. 1005, 20),

40. The *Suga* translation (Exh. 1005) describes a wireless device having two communication paths, one for data (wireless LAN) and one for voice (Wireless phone line). *See* Exh. 1005, Abstract. Data transfers are prohibited or prioritized from transmission on wireless phone lines. However, wireless LAN lines are prioritized for data transmission. *Id.* The advantage of such restrictions is to use “wireless LAN lines ... on in-house dedicated lines 7, [so] the company system can be used to reduce communication costs.” *Id.* *Suga* “is not expected to be limited to textual information, but will also include video and audio information with large amounts of data.” *Id.*, 4. Furthermore, the problem addressed by *Suga* is “information exchanges via wireless phone lines pose problems in terms of transfer speeds and communication costs. Specifically, as the volume of data transferred and the number of transfers increases, continued use of wireless phone lines will not allow for smooth information exchanges.”

41. The purpose of the *Suga* is “to address these circumstances by providing a portable information device that has a wireless phone function and a line switching method therefore, it can realize low-cost, high-speed wireless communication.” *Id.*, 4. *Suga* switches between networks (e.g., switching equipment, public network, access point) depending on whether the data is transferred between nodes (e.g., cell phone, server, PCs). *See* Exh. 1005, FIG. 1.

42. The invention of *Suga* “is a portable information device comprising: a wireless phone line (wireless cellular network) connecting means that enables connection to a wireless phone line; a wireless LAN (wireless local area network) 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 to prohibit reception of data sent via the wireless phone line.” *Id.* *Suga* reference is about communications and not about secure transactions that use smart cards.

2. Gorsuch

43. International Patent Application Publication No. WO 2001/22662 (“*Gorsuch*”) (Exh. 1006) was filed on August 28, 2000, and published on March 29, 2001. *Gorsuch* claims priority to U.S. Patent Application 09/400,136 with a filing date of September 21, 1999.

44. *Gorsuch* describes:

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. The low-range, high-speed wireless communication path is a wireless LAN connection such as an IEEE 802.11-compliant wireless LAN and

the long-range, low-speed wireless communication mode is a cellular CDMA-type connection. Determining whether the first IEEE 802.11 mode is available can be done by detecting a beacon signal, or by transmitting a probe request message and detecting a probe response message in response to the probe request, indicating the presence or availability of the short-range, high-speed wireless communication path. Alternatively, the availability of short-range, high-speed wireless communication path can be detected by simply detecting activity on it.

Exh. 1006, 1. What is described is using a first communication path for data to be carried between nodes. If another more appropriate path is determined to exist, then that path is used.

45. *Gorsuch* relies on a newly accepted standard, IEEE 802.11, which specifies a protocol for a wireless LAN's media access control (MAC) and physical (PHY) layers. As with cellular systems, a W-LAN connection can hand off from one area of coverage (a "basic service set" in IEEE 802.11 parlance) to the next. *Id.* 3-4.

46. The *Gorsuch* reference describes its purpose as:

to have a device which can automatically select the cheaper and faster W-LAN when possible, e.g., when within its range, and to resort to the long range cellular network when access to the W-LAN is not possible or practical. Previously, two devices would have been required, one for accessing the W-LAN and one for accessing the long range network.

At best, these two devices could fit into two slots in, for example, a laptop computer, requiring the user to select, either through software or hardware, which device, and hence, which network to access. The user might typically then have to disconnect one of the devices to install the other, and manually reconfigure the computer.

The present invention, on the other hand, is a single device which connects directly to a W-LAN using a protocol such as IEEE 802.11 when such a connection is possible and automatically reverts to connecting to the long range network only when out of range of the W-LAN base stations.

Exh. 1006, 4. *Gorsuch* aims to select a cheaper and faster network to route data between nodes (e.g., 615, 617 of Exh. 1006, FIG. 5).

VII. CLAIM CONSTRUCTION

47. I understand from Patent Owner's counsel that patent claims generally are given their plain and ordinary meaning to one of skill in the art as of the priority date of the analyzed claim. I also understand from Patent Owner's counsel that the intrinsic record of the Patent itself may help define that ordinary meaning. However, the intrinsic record may also reflect the patentee's clear desire to be his own lexicographer and depart from the ordinary meaning of a claim term.

48. To the extent that a claim term of the '294 Patent is used in the same way as the same term in the relevant standards, technical specifications, and/or prior

art, it is my position that such claim term should be given its plain and ordinary meaning to one of skill in the art, which is reflected in the relevant standards, technical specifications, and/or prior art.

A. “Invariable Activation Comand”

49. The Petitioner asserts that the “invariable activation command” where “the command ‘activates’ a data transfer and is ‘invariable’ in that the user cannot control which path the data transfer follows.” Pet. 29. However, this definition does not make technical sense. Petitioner’s definition is not how the specification of the ’294 Patent describes “invariable activation command.” The specification states, “upon an activation cue being received by portable electronic device 10, switching element 44b switches to its activated state. If control device 12 is selectively triggered by the portable electronic device holder while switching element 44b is in this activated state, a data exchange will be initiated between portable electronic device 10 and the external data exchange device 9.” Exh. 1001, 10:14-20. “Upon control device 12 being selectively triggered to issue an activation command by the portable electronic device holder, one of two alternate data conveyance operations will be initiated with portable electronic device 10. Exh. 1001, 10:26-29. The state of the switching element determines which of the two alternate data conveyance operations is initiated, not the “activation command” as asserted by Petitioner.

Furthermore, it is the “activation cue” that sets the state that ultimately results in data being conveyed to a display or transmitted to the data exchange device.

50. I do note that many of the truncated cites on pages 30-31 of the Petition leave the “activation cue” out of the cites. The “activation cue” is crucial to the functioning of the “invariable activation command” as claimed in the ’294 patent.

51. Petitioner’s definition of “a command to transmit data through either a first or second communication link, where the decision of which link is used is independent of the command issued,” (Pet. 32,) fails even to address the term invariable. Furthermore, Petitioner’s definition ignores its dependency on the activation cue and the state of the switching element.

52. The definition of “invariable activation command” is an activation command issued by a control device in response to a user that relies on the state of the switching element to determine a data conveyance path. Once issued, the portable electronic device holder cannot select to issue different activation commands.

B. “activation cue”

53. The claim term “activation cue” means a predetermined indicator, such as “a predetermined bit sequence” (Exh. 1001, 6:1-3), that is “recognized by the electronic device as an activation cue” *Id.* A POSITA would understand that the

“activation cue” must be intended as a predetermined indicator. I am not saying the “activation cue” has to be a predetermined bit sequence; instead, the “activation cue” has to be designed or created for use in a device to cause activation. Not simply a message that is transmitted over a communication path.

“data conveyance switching element”

54. The term “data conveyance switching element” should be given its plain meaning, which is the switching of the data. It is the data that is switched by the switching element between data paths; specifically, the switching element switches the data path for conveyed data. States are not switched by the “data conveyance switching element; rather, states are assigned to what the switch is conveying. “[I]f an activation cue is received at the cue receiver, assigning its first state to the switching element, while if no activation cue is received at the cue receiver, assigning its second state to the switching element; and selectively triggering the control device to issue an invariable activation command.” Exh. 1001, Abstract. The actual switching element is described in the ’294 Patent as a “[s]witching element 44b [that] can be any type of device allowing data to be conveyed according to alternate data conveyance operations in response to an activation cue being received by transceiver 18 or not.” *Id.* 9:28-31. The switching element is for switching data, i.e., data conveyance operations.

C. “data exchange device” and “external data exchange device”

55. 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. In Figure 1, item 9 is a “data exchange device” (*id.*, Fig. 1,) and “can be any sort of data exchange device comprising an electronic circuit (not shown) therein and a data transceiver 9a” (*id.*, 9:4-6). Similarly, item 9' in Figure 3 is a “data exchange device” (*id.*, 12:62), and also item 104 in Figure 4 (*id.*, 13:28). An external data exchange device is not a transceiver but a device with a transceiver.

D. “Close Proximity”

56. Close proximity means within a several-meter range [or less]. *See* Exh. 1001, 15:55-57. The electronic device is described as communicating with a data exchange device, such as an automatic teller machine, computer, or interface machine. *See* Exh. 1001, 9:8-11. The '294 Patent also describes “a proximity transaction wherein devices 102 and 104 are physically close to one another. Exh. 1001, 13:36-37. In all of these examples, a person is physically close to the machines to view the interface and operate the machine. Therefore, a POSITA would consider close proximity to be one meter or less.

57. I applied a plain and ordinary meaning in my analysis of these claim terms. I also reserve the right to offer additional opinions on claim construction in response to arguments that may be made by Petitioner.

VIII. UNPATENTABILITY OF THE '294 PATENT'S CHALLENGED CLAIMS

58. In my Declaration, I analyze the following bases for invalidity:

Ground	Basis	Challenged Claims
1.	35 U.S.C. § 103 <i>Suga and Gorsuch</i>	1-20

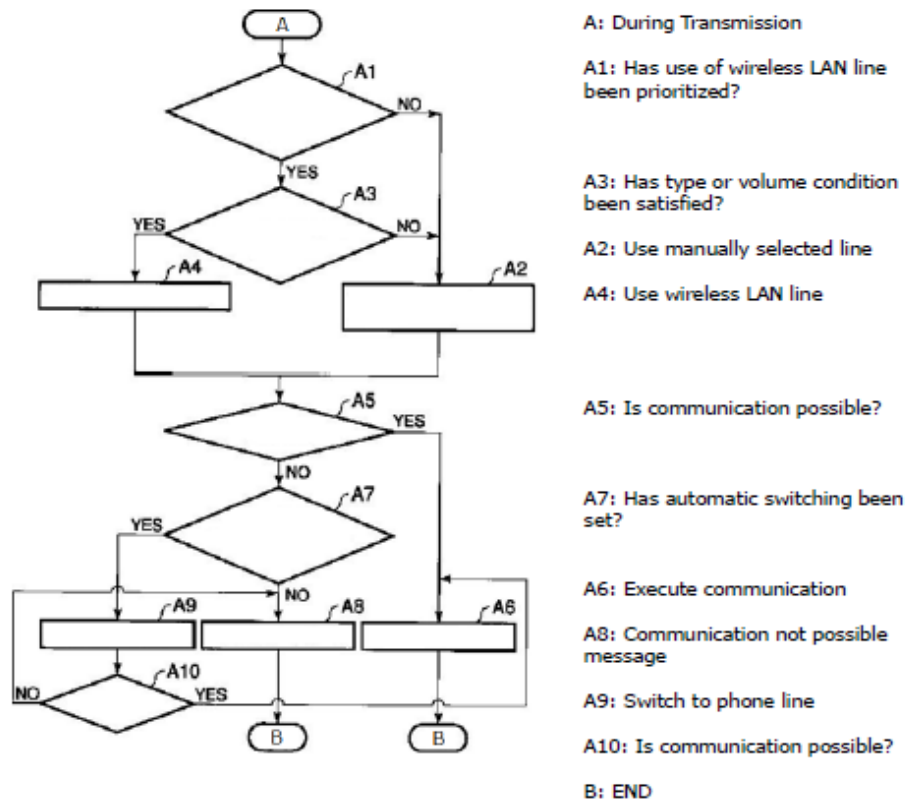
A. GROUND 1: Obviousness Based on *Suga* and *Gorsuch*.

59. In my opinion, claims 1-20 are not obvious based on *Suga* (Exh. 1005) and *Gorsuch* (Exh. 1006), given my understanding of what constitutes obviousness. *See supra* ¶¶23-24. As detailed subsequently, *Suga* in view of *Gorsuch* fails to teach or disclose at least one claim element of each of the claims 1-20.

1. No Motivation to Combine *Suga* in view of *Gorsuch*

60. *Suga*'s approach teaches the selection of a communication path rather than switching based on a trigger, e.g., an invariable activation command, in response to an invariable activation cue. The flowchart of *Suga* Fig. 6 describes the operation performed during data transmission.

[Fig. 6]



Exh. 1005, Fig. 6. The specification of *Suga* explains that:

First, the operations performed during data transmission will be described with reference to Fig. 6.

[0047]

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).

[0048]

If not enabled, the user attempts to communicate with a counterparty using a manually selected line (step A2). If enabled, the controller determines whether the type and volume of data to be transmitted meet set conditions (step A3).

[0049]

If set conditions are not met, the user attempts to communicate with a counterparty using a manually selected line (step A2). If set conditions are met, the user attempts to communicate with a counterparty using a wireless LAN line (step A4).

Exh. 1005, 9.

61. What is described is that communication path selection is based upon the type and volume of data to be transmitted and cost considerations, not on an activation cue as claimed in the '294 Patent. The settings screen of *Suga* describes the users setting the path selection parameters:

In the settings screen, 'Prioritize use of wireless LAN' and "Automatically switch to phone line if wireless LAN line cannot be used" are provided under the settings for "During Transmission," and the user can enable or disable either of them. When 'Prioritize use of wireless LAN,' is selected, conditions can be set, namely, "When type of content is XXXX" and 'When content volume exceeds XXXX.'

Exh. 1005, 9. The automatic switching is to automatically default to a phone line (cell phone network) if wireless LAN (wireless local area network) is not available. The alternative is manually selecting the data path if a wireless LAN is unavailable. The switching is for selecting a transmission data path to access a network over which the data is carried.

62. A separate setup occurs to block the reception of data.

... because the cell phone is switched so that one of the wireless phone line and the wireless LAN line is selectively used, and is set to prohibit the reception of data transmitted via a wireless phone line or to prioritize use of a wireless LAN line during data transmissions, communication can be easily carried out via an in-house dedicated line such as a LAN set up in a company, enabling low-cost, high-speed communication.

Exh. 1005, 10. To be selectively used, both the wireless cell phone network and the wireless LAN network must be both available and active in *Suga*.

63. Even the abstract supports that if any switching occurs, it is between phone lines and wireless LAN lines used to access the different networks, where the wireless LAN network may be prioritized. *See* Exh. 1005, Abstract.

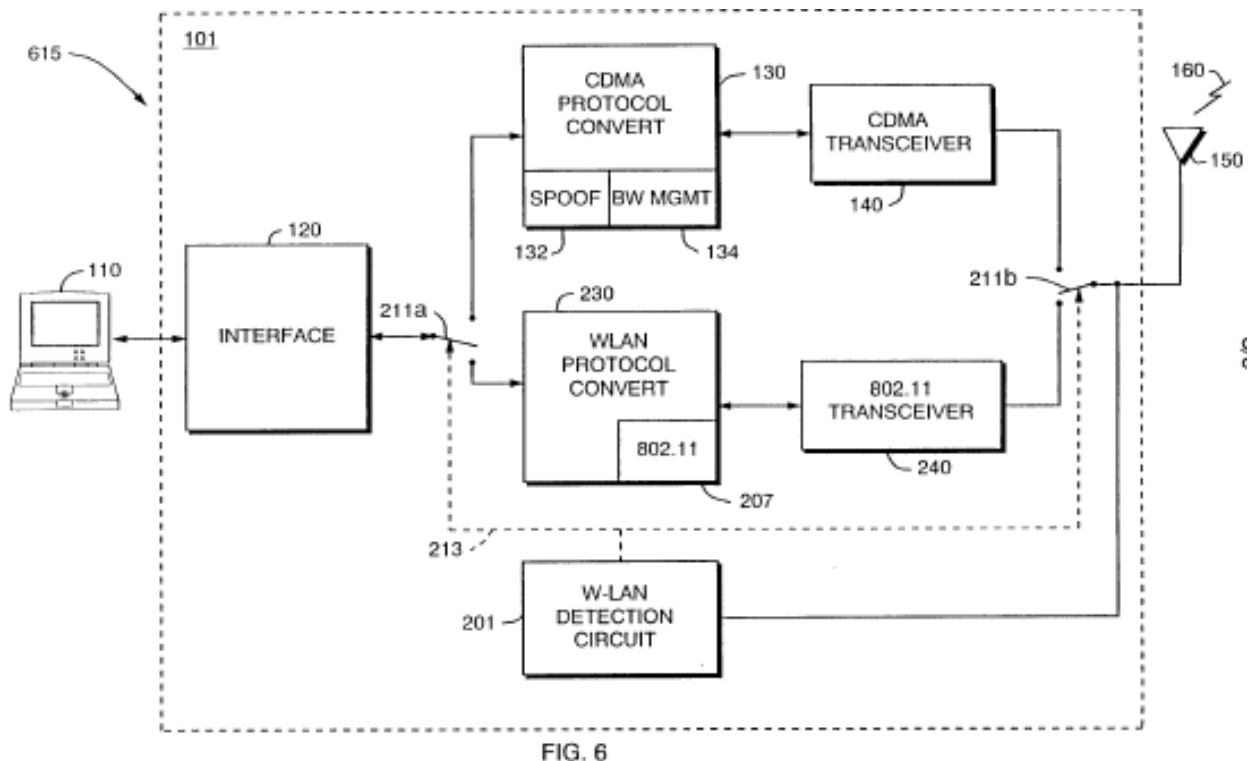
64. The *Gorsuch* reference describes a similar approach of having a preferred data path. The Summary of the Invention of *Gorsuch* states:

In one embodiment, the step of determining whether the first wireless communication mode is available is performed by passive scanning, such as by detecting a beacon signal. In another embodiment, active scanning is used, for example, by transmitting a probe request message and detecting a probe response message in response to the probe request which indicates the presence of the first wireless communication path. In yet another embodiment, determining whether the first wireless communication path is available comprises simply detecting activity on the first wireless communication path.

If the first wireless digital communication mode is available, a communication session between the first and second sites using the first wireless digital communication path is established. On the other hand, if the first wireless digital communication path is not available, a communication session between the first and second sites using the second wireless digital communication path is established. In this case, the local wireless transceiver is controlled to make it appear to the second wireless digital communication path as though the bandwidth were continuously available during the communication session, irrespective of any actual need to transport data communication signals between said first and second sites. In the absence of such a need to transport data communication signals between the first and second sites, the bandwidth is made available for wireless communication by other wireless transceivers. In one preferred embodiment, the second wireless digital communication path is provided by establishing a logical connection using a higher layer protocol, such as a network

layer protocol, from a subscriber unit, such as may be connected to a portable computer node, to an intended peer node, such as another computer. The network layer logical connection is made through a wireless channel which provides a physical layer connection between the portable computer node, through a base station, and the intended peer node. In response to relatively low utilization of the wireless channel, the physical layer channel is released while maintaining the appearance of a network layer connection to the higher level protocols.

Exh. 1006, 5-6. A path selection based on path availability to a network is described in *Gorsuch*. The paths are depicted in Fig. 6 of *Gorsuch*:



Exh. 1006, FIG. 6.

65. *Suga* and *Gorsuch* describe path selection as an approach to accessing a network and prioritizing a LAN rather than a cellular network. There is no motivation to combine the references to achieve the '294 Patent's claim elements of claims 1-20. Neither *Suga* nor *Gorsuch* teaches or describes an "invariable activation cue" in addition to other elements. If the combination fails to describe all elements, there can be no motivation to make such a combination. Furthermore, the '294 Patent is directed to data transfer security, and the combined references do not pertain to security.

66. The selection of which data path occurs in the user interface of *Suga*. This contrasts *Gorsuch*'s approach, which prioritizes reception over the LAN by default. A POSITA skilled in the art would not look to modify *Suga* with the teachings of *Gorsuch*.

67. *Suga* and *Gorsuch* are from different fields of endeavor than the '294 Patent. The '294 Patent is directed to accessing data securely, and both *Suga* and *Gorsuch* are directed towards selecting data paths between a cellular network and LAN to reduce the expense of data transmission. Therefore, the references are from a different field than the '294 Patent.

68. The problem solved by the '294 Patent is creating a secure wireless transmission between a handheld device and a transceiver. Selecting a data path

based on its ability to carry large amounts of data cheaply, as in the *Suga* and *Gorsuch* references, is irrelevant and not pertinent as their only consideration is the cost of data transmission, not the data's security.

69. It is my opinion that there is no motivation to combine the references to teach or describe the elements of the '294 Patent because the '294 Patent creates a secure wireless transmission system for transactions and other use cases, while the combination of *Suga* and *Gorsuch* teaches low-cost data transmission.

2. Independent Claim 1

70. It is my opinion that *Suga* in view of *Gorsuch* does not render claim 1 obvious because at least one claim element is not found in the combined references.

a. [1.a] “an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;”

71. The Petition asserts: *Suga* discloses this limitation:

For example, *Suga* discloses that the cell phone includes, among other parts, MPU 40, a memory card 35, flash memory 36, and SRAM 37, which comprise an electronic circuit. *Suga*, [0035]-[0037]. A power supply 41 supplies power to the components of the cell phone 1, including the electronic circuit, as shown in Fig. 2 ... The memory card 35 ‘is used to store content handled by the cell phone 1’ such as ‘e-mails, audio information, and video information.’ *Suga*, [0035]. Flash memory 36 ‘is a memory built into the cell phone 1 and is used to store

various types of data’ and SRAM 37 ‘is a memory that provides a work area for the MPU 40.’

Pet. 33-35.

72. Data is a specific claim element used throughout the ’294 Patent’s claims. Simply establishing some type of data that is stored, processed, input, and output fails to establish that it is the specific “data” element used in the ’294 Patent’s claims. The stored data of the claim is the same data later exchanged in a subsequent claim element. I cannot identify what “data” the Petitioner is referring to in order to meet the element of this and other claims that utilize this element.

73. For example, claim 1 of the ’294 Patent uses “data” in elements [1.a], [1.h.i], and [1.h.ii]. The stored data must also be the data that is sent in element [1.h.i] and [1.h.ii]. Petitioner makes no such data identification for element [1.a].

74. The Petition fails to identify what data in the combined references is the “data” used in elements [1.a], [1.h.i] and [1.h.ii]. The Petition generally states that cell phones can store, transmit, and receive data, including email and videos, without specifying what data is stored, transmitted, or received.

75. The data used to meet an element of a claim cannot change to a different type of data each time it is cited.

- b. **[1.b] “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;”**

76. Nowhere in the claims or specification does the word keyboard appear. Petitioner is reading into the claim element a keyboard. Furthermore, the term keypad is used in the '294 patent, not for email but for a “validation means in the form of a keypad allowing the portable electronic device holder to type in a personal identification number (PIN).” *See* Exh. 1001, 8:45-47. 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.

77. Further, keyboard 39 is mentioned only once in the specification of *Suga* and twice in the listings of the figures:

The flash memory 36 is a memory built into the cell phone 1 and is used to store various types of data. The SRAM 37 is a memory that provides a work area for the MPU 40. The LCD panel is used to display various types of information on a screen. The keyboard 39 is used by the user to perform input operations related to settings, etc.

Exh. 1005, 8 [0036]. The description of a keyboard in *Suga* is for use in entering settings. There is no suggestion or indication that a keyboard is used to enter a PIN as described in the specification of the '924 Patent.

78. Further, the purpose of the '294 patent is security. That is why a keypad and PIN are described in the specification of the '294 patent. An email application sending an email has nothing to do with security.

79. *Suga* does mention transmitting and receiving email, but there is no description of the process and activities that occur when an email is sent. Petitioner admits as much and states, “*Suga* is silent in describing the process for a user to initiate sending an email.” Pet. 35. No information about the messaging to the controller, interaction between the email application and the cell phone’s operating system, or whether the cell phone even has an operating system. Is the email application part of the cell phone, or is it a separate application? It would be impossible for a POSITA to understand how the email of the cell phone of *Suga* operates and how messages from the email application to the controller operate without knowing more than the cell phone is email-capable. Additionally, there is no description or example of the email application used. Is it a separate application or device or integrated with the cell phone? Stating a cell phone has email does not identify how it has email. A POSITA would require more information than the

reference provides to understand the messaging between the controller and the email application.

80. An email is only sent if a communication link is already established. Petitioner asserts that “a POSITA would have understood that to send an email a user would trigger the device by pressing one or more buttons on the keyboard 39 to initiate the transmission.” Pet. 35. A POSITA would understand that just because a person sends an email, no triggering of a device occurs. A POSITA knows (1) transmission of email only occurs if a network connection exists; otherwise, nothing can be sent; and (2) a connection to a network is not affected or influenced by an email application, and no “invariable activation command” would be sent. No evidence of an email selecting a network path is disclosed in any of the references or the ’294 patent.

81. Petitioner’s statement that “*Suga*’s device transmits an email either via W-Lan or cellular based on W-Lan’s ability, providing the user no option to vary which connection is used for a given transmission” makes no sense. Pet. 3. First, a POSITA would understand that the statement is inaccurate, as the user in *Suga*’s settings sets up the options. Second, email is only sent if a connection to a network exists; the application does not know which connection it is using or if the connection changes after it is sent but before actual transmission. A POSITA would

understand that a device's network layer (the selection of a network path) differs from the application layer (such as an email application). This fact that a POSITA would understand the different layers is supported by the teachings of both *Suga* and *Gorsuch*. *Suga* has a MAC¹ processing unit to control the MAC communication layer. See Exh. 1005, 8. The *Gorsuch* reference also discusses the different layers:

[I]n one preferred embodiment, the second wireless digital communication path is provided by establishing a logical connection user a higher layer protocol, such as a network layer protocol.

Exh. 1006, 6. The sending of an email does not RESULT in one of two data conveyance operations. Sending an email at the application layer requires an active data path. The email application does not know of more than a single active data path and lacks control over that data path or the selection of an alternative data path. A POSITA knows that is the point of having different OSI model layers. Each layer

¹ The medium access control (MAC) is a sublayer of the data link layer of the open system interconnections (OSI) reference model for data transmission.

is distinct from the layers above it. If any other interpretation is used, then a POSITA would have to have conflicting interpretations of the *Suga* and *Gorsuch*.

82. A sent mail will sit in an outbox if no communication link is available. Further, if the application is shut down before the email is sent, it sits in the outbox. Send mail does not operate as an activation message, as it has no control over what is activated. Email uses whatever communication link is active when messages are sent.

83. It is impossible for a keyboard using email to meet claim element [1.b] of claim 1, where a keypad used for verification of PIN is claimed in the '294 Patent and the email application of *Suga* is executed in the application level, and has no information other than a communication path is available or not.

- c. **[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”**

84. The data exchange device is defined in the specification as:

As illustrated in FIG. 1, a communication link can be established between the electronic device transceiver 18 and the transceiver 9a of data exchange device 9, Data exchange device 9 can be any sort of data exchange device comprising an electronic circuit (not shown) therein and a data transceiver 9a therein able to cooperate with transceiver 18

of device 10. In one embodiment, data exchange device 9 is another portable electronic device 10. Data exchange device 10 can alternately be a computer, an interface machine such as an automatic teller machine, or any other suitable data exchange device.

Exh. 1001, 9:1-11.

85. 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”).

86. The *Gorsuch*’s W-LAN detection circuit 201 provides information on W-LAN availability, not the data exchange device. A POSITA would understand that simply because the availability of the W-Lan is detected does not mean a data exchange device of the ’294 Patent is active. Networking devices, such as access points or cellular base stations, carry data for other devices and are not the endpoint or node for receiving the data. After all, the purpose of the ’294 Patent is to secure transactions between a handheld device and a data exchange device.

87. In summary, the W-LAN is a pipe used to carry data. A notification that the pipe is in place does not mean a data exchange device is active and an activation cue has not been sent by a data exchange device.

- d. **[1.d] “a second data transceiver operatively linked to said electronic 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 communication link;”**

88. No second external data exchange device is described in the combination of *Suga* in view of *Gorsuch*. A connection to a network does not establish a connection to a second external data exchange device. Establishing a network connection only provides a path that may or may not be connected with a second data transceiver for exchanging data. A POSITA understands that a network is only a pipe and sending data to a network is meaningless, as the network is not a device to which data is intended; instead, a device connected to the network must be the device to which data is intended. *See supra* ¶¶84-85.

- e. **[1.e] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from a source external to said cellular phone”**

89. The '294 patent identifies an activation cue “in the form of a data communication of a specific type which will be recognized by the electronic device 10 as an activation cue, for example, a predetermined bit sequence.” Exh. 1001, 9:24-27. The electronic device must recognize the " activation cue " as an activation cue. Thus, simply calling something an “activation cue” is improper if the electronic

device does not explicitly recognize it as an “activation cue.” For example, if a receiver comes into range of a transmitter and processes data received at that receiver when a signal carrying that data from the transmitter is strong enough to be processed at the receiver. The receiver is not waiting for a specific “recognizable activation cue.” Instead, the receiver tried to receive and process a signal. Further, “upon an activation cue being received by portable electronic device 10, switching element 44b switches to its activated state.” Exh. 1001, 10:14-16.

90. The Petition asserts that *Suga* incorporating *Gorsuch*’s W-LAN detection circuit 201 to provide information on the availability of W-LAN is a “cue receiver” as claimed in element [1.e] of the ’294 patent. First, *Suga* only describes creating rules for selecting communication paths when available are defined by the user using a user interface (settings screen):

In the settings screen, “Prioritize use of wireless LAN” and “Automatically switch to phone line if wireless LAN line cannot be used” are provided under the settings for “During Transmission,” and the user can enable or disable either of them. When “Prioritize use of wireless LAN,” is selected, conditions can be set, namely, “When type of content is XXXX” and “When content volume exceeds XXXX.”

See Exh. 1005 [0043]. Further, *Suga* describes trying to use the different communication paths because of the settings to determine if they are available or not:

First, the operations performed during data transmission will be described with reference to Fig. 6.

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).

If not enabled, the user attempts to communicate with a counterparty using a manually selected line (step A2). If enabled, the controller determines whether the type and volume of data to be transmitted meet set conditions (step A3).

If set conditions are not met, the user attempts to communicate with a counterparty using a manually selected line (step A2). If set conditions are met, the user attempts to communicate with a counterparty using a wireless LAN line (step A4).

Communication is attempted, and it is determined whether communication is possible. If communication is possible, communication is performed (step A6) and the process is terminated. If communication is not possible, it is determined whether or not the "Automatically switch to phone line if wireless LAN line cannot be used" setting is enabled (step A7).

If the setting is not enabled, a transmission failure message is displayed on the LCD panel 38 (step A8) and the process is terminated. If the setting is enabled, the controller switches to a phone line and attempts to communicate with the counterparty (step A9).

Communication is attempted, and it is determined whether communication is possible (step A10). If communication is possible, communication is performed (step A6) and the process is terminated. If communication is not possible, a transmission failure message is displayed on the LCD panel 38 (step A8) and the process is terminated.

Exh. 1005, 9-10 [0046-0056].

91. The connection to a wireless LAN is not related to “an activation cue,” as described in the specification of the ’294 patent as “in the form of a data communication of a specific type which will be recognized by the electronic device 10 as an activation cue, for example, a predetermined bit sequence.” What is claimed is not data communication; rather, data communication that has to be of a specific type. The specific type is the “activation cue” coming “from [a] data exchange device transceiver.” Exh. 1001, 12:60-62. *See supra* ¶¶84-85.

92. It is my opinion, the activation cue is not described in *Suga* in view of *Grosuch* because: (1) the activation cue must originate at a data exchange device and identify that a data exchange device is ready to receive data, (2) a POSITA would understand that connection to a network does not mean a data exchange device is

connected to the network, and (3) a POSITA would understand that a network ready to receive data is different than a network receiving data for a device connected to the network.

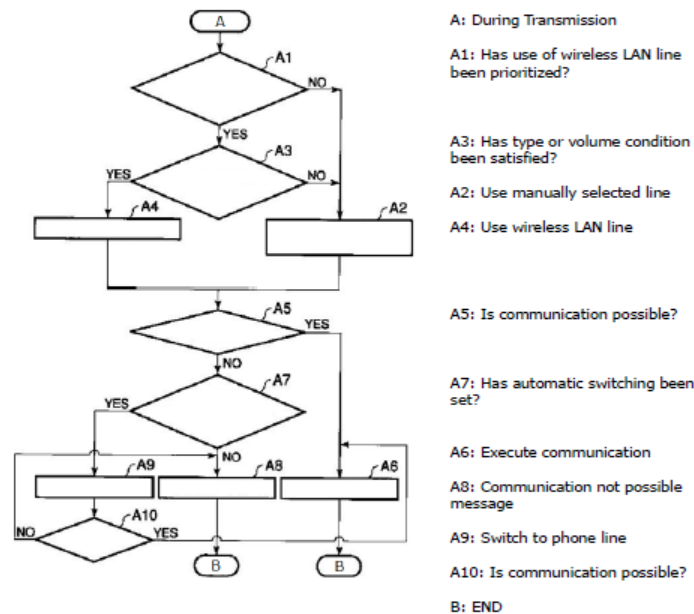
93. The '294 Patent claims more than just connecting to a network.

- f. **[1.f] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being assigned a first state upon an activation cue assigned a second state when no activation cue was received by said cue receiver; and”**

94. The “activation cue” does not originate in a device supporting the network 106 of the '294 Patent; rather, it originates from a specific device claimed in claim element [1.e], namely a source external to said cellular phone. *See supra* ¶¶89-93.

95. The assignment of the switching element states does not occur due to an “activation cue” as required in claim element [1.f]. Rather, the *Suga* has a user identify a priority for selecting communication paths. Those priorities are set by the user as depicted in the flowchart of Fig. 6:

[Fig. 6]



Exh. 1005, 10.

96. Rather than relying on the state of the switching element of the '294 Patent, *Suga* relies on processing its priorities set in the graphical user interface. “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). Exh. 1005, 9 [0047]. The explanation in *Suga* goes on to use terms like “if not enabled,” *id.*, [0048]; “if set conditions are not met,” *id.*, [0049]; “[i]f communication is not possible, it is determined whether or not the ‘Automatic switch to phone line if wireless LAN line cannot be used,” *id.*, [0050]; “If the setting is not enabled,” *id.*, [0051]; and “communication is attempted, and it is determined whether the communication is possible,” *id.*, [0052]. These terms demonstrate that

a state is not set. A POSITA would understand from reading the flowchart with the associated explanation that a plurality of user created rules is applied to every transmission request.

97. There is no “switching element being assigned a first state upon an activation cue assigned a second state when no activation cue was received by said cue receiver.” Exh. 1001, 19:23-28. Simply calling something a state is not the same as assigning a state within a cell phone as claim 1 of the '294 Patent requires. If states were assigned, then the flowchart of Fig. 6 would not need to be run every time a transmission occurs, checking each parameter set by the user for prioritizing a communication link, as the state of the “switching element” would have been known.

98. It is my opinion that the *Suga* reference in view of the *Gorsuch* does not describe element [1.e] because no states are assigned in addition to no disclosure of an “activation cue.”

- g. **[1.h.i] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if said switching element is in said first state, a first data conveyance operation will be initiated through the instrumentality of said first data transceiver for sending data from said electronic circuit to the first external data exchange device over said first communication link; and”**

99. The claim element [1.e] establishes the only way to be assigned a first state is upon receipt of an activation cue, which is impossible because there is no activation cue. *See supra* ¶¶89-93. And there are no states assigned. *See supra* ¶¶89-92. Finally, there is no external data exchange device. *See supra* ¶¶84-85.

- h. **[1.h.ii] “if said switching element is in said second state, a second data conveyance operation will be initiated through the instrumentality of said second data transceiver for sending data from said electronic circuit to the second external data exchange device over said second communication link.”**

100. The claim element [1.e] establishes the only way to be assigned a first state is upon receipt of an activation cue, which is impossible because there is no activation cue. *See supra* ¶¶89-93. There are no states assigned in the combined teachings of *Suga* and *Gorsuch*, and thus, there can be no “second state.” *See supra* ¶¶94-98. Finally, there is no external data exchange device. *See supra* ¶¶84-85.

101. It is my opinion that claim 1 of the '294 patent is not obvious in light of the combination of *Suga* in view of *Gorsuch*, as the combined references do not provide the claim elements associated with an activation cue, invariable activation command, data exchange device, and other elements as discussed above.

3. Claim 2 – “A cellular phone as defined in claim 1, further comprising a display screen operatively linked to said electronic circuit.”

102. Claim 2 is a dependent claim and incorporates all the elements of claim 1.

103. All the elements of claim 1 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100.

104. It is my opinion that all of the claim elements of claim 2 are not found in the combined references of *Suga* and *Gorsuch* references because at least an “activation cue” and “switching element” of claim 1 are relied on and not disclosed.

4. Claim 3 – “A cellular phone as defined in claim 1, wherein said first data transceiver includes said cue receiver.”

105. Claim 3 is a dependent claim and incorporates all the elements of claim 1.

106. All the elements of claim 1 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100.

107. It is my opinion that all of the claim elements of claim 3 are not found in the combined references of *Suga* and *Gorsuch* references because elements of claim 1 are relied on and not disclosed such as the “activation cue” and “switching element.”

5. Claim 4 – “A cellular phone as defined in claim 1, wherein said control device is one of a manually activated button, a keypad for receiving a PIN code, a biometric parameter detector and a combination thereof.”

108. Claim 4 is a dependent claim and incorporates all the elements of claim 1. As discussed previously, no keyboard is in the control device list for this claim element. *See supra* ¶¶76-86.

109. All the elements of claim 1 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100.

110. It is my opinion that all of the claim elements of claim 4 are not found in the combined references of *Suga* and *Gorsuch* references because elements of claim 1 are relied on and not disclosed, such as the “activation cue” and “switching element.”

6. Claim 5 – “A cellular phone as defined in claim 1, wherein said electronic circuit includes said switching element.”

111. Claim 5 is a dependent claim and incorporates all the elements of claim 1.

112. All the elements of claim 1 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100.

113. It is my opinion that all of the claim elements of claim 5 are not found in the combined references of *Suga* and *Gorsuch* references because elements of claim 1 are relied on and not disclosed, such as the “activation cue” and “switching element.”

7. Claim 6 – “A cellular phone as defined in claim 5, wherein said electronic circuit comprises a microchip, and wherein said switching element is a series of instructions programmed onto said microchip.”

114. Claim 6 is a dependent claim and incorporates all the elements of independent claim 1 and dependent claim 5.

115. All the elements of claim 1 and dependent claim 5 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100, 111-113.

116. It is my opinion that all of the claim elements of claim 6 are not found in the combined references of *Suga* and *Gorsuch* references because elements of

claims 1 and 5 are relied on and not disclosed, such as the “activation cue” and “switching element.”

8. Claim 7 – “A cellular phone as defined in claim 1, wherein said switching element comprises a logical circuit.”

117. Claim 7 is a dependent claim and incorporates all the elements of claim 1.

118. All the elements of claim 1 are not disclosed in the *Suga* and *Gorsuch* references. *See supra* ¶¶71-100.

119. Petitioner asserted that the MPU 40 executed software that acted as a switching element. The *Suga* reference states that “MPU 40 controls the operations of the entire cell phone 1. For example, the MPU 40 executes in the SRAM 37 a control program that realizes the line switching controls of the present embodiment and that controls switching between the circuit for phone line connections and the wireless LAN controller 31 for wireless LAN line connections.” Exh. 1005, 8 [0037].

120. Furthermore, Fig. 2 of *Suga* shows that only the MPU 40 has no logical circuit between the cellular transceiver and the W-LAN transceiver. A POSITA understands that an MPU is a processor that executes firmware to operate and enables it to execute higher-level software. There is a difference between a logic circuit acting as a switch and an MPU executing software, which serves as a

switching unit. It is the higher-level software that is programmed to perform the switching function, i.e., switching element. In the current claim, the Petitioner is now using the same element and trying to argue that the firmware and circuits that the MPU operates on are the switching elements. If such an interpretation is used, then there is no difference between the claim element of claims 6 and 7.

121. It is my opinion that all of the claim elements of claim 7 are not found in the combined references of *Suga* and *Gorsuch* references because elements of claim 1 are relied on and not disclosed, such as the “activation cue” and “switching element.”

- 9. Claim 8 – “A cellular phone as defined in claim 1, wherein said first data transceiver comprises a proximity transceiver for accomplishing a wireless data exchange with a first external data exchange device through a direct link representing said first communication link where the cellular phone is conveyed toward a close proximity of the first external data exchange device and within a range to receive the activation cue to initiate the wireless data exchange.”**

122. Claim 8 is a dependent claim and incorporates all the elements of claim 1.

123. All the elements of claim 1 are not disclosed in the combination of *Suga* and *Gorsuch* or provided by what a POSITA would know. *See supra* ¶¶71-100.

124. Petitioner asserts that connecting to a network is a direct data link between a data transceiver and a first external data exchange device. Data sent from one network node is only intended to be received by the other node. A POSITA would know that a direct link means direct node-to-node communication without going through a network. Communication with an access point to establish a network connection to a Wi-Fi (W-LAN) is not a direct link, as the connection is not for direct node-to-node communication but for any communication directed to a node on the network.

125. The '294 patent specification demonstrates that there is a different between direct linked devices and a connection to a network:

portable electronic device 102 will communicate with data exchange device 104 through a direct link, for example in a proximity transaction wherein devices 102 and 104 are physically close to one another; while portable electronic device 102 will communicate with second data exchange device 108, 109 or 110 through a communication network 106 wherein devices 102 and 108, 109 or 110 may be physically distant from one another.

Exh. 1001, 13:33-41. Portable electronic device 102 is physically close to 104 and distant from 108, 109, or 110. The communication network 106 is described as:

Network 106 may be for example the Internet or any other suitable data exchange communication network that may include operative

communication protocols. The electronic circuit 116 of portable electronic device 102 may be equipped with suitable resident network interface applications such as WEB or WAP (Wireless Application Protocol) applications, including WEB browsers or the like, in order to communicate through transceiver 122 and network 106 with a remote server 108 and/or a remote terminal 109 and/or a remote portable device 110 and/or any other suitable remote electronic apparatus.

Exh. 1001, 14:27-37. Network 106 is a wireless network. *Suga* or *Gorsuch*'s access points are network infrastructure devices. A POSITA would know that the access point is a network device, not a direct link or proximity device for direct communication, as described in the specification of the '294 Patent.

126. *Gorsuch* describes establishing a communication path from a subscriber unit, (e.g., connected to a portable computer node, to an intended peer node such as another computer, *etc.*). Exh. 1006, 6. The "addressing of the messages"

limitation in the combination of *Suga* and *Gorsuch* both use IEEE 802.11.² For WiFi communication paths, such as those taught in IEEE 802.11, “a direct connection” occurs when two nodes communicate directly, and which does not occur over a communication network.

127. POSITA would also understand from *Suga* that emails sent or received from one node to another pass through the communication network and access point (or base station, depending on the communication path); the nodes are not directly linked. Furthermore, when working with the internet, **a direct link is a direct connection that allows for data exchange without a network.**

128. The claim language does not simply state proximity; rather, it has to be in close proximity of the first external data exchange device. *See* Exh. 1001, 19:67. Close proximity is described in the '294 patent as “a proximity transceiver that allows data transmission within a limited range, such as within several meters for

² IEEE 802.11 is a family of standards for wireless local area networks (WLANs), commonly known as Wi-Fi, that define the protocols for wireless communication, including medium access control (MAC) and physical layer (PHY).

example.” Exh. 1001, 15:55-57. Close proximity is one meter or less. *See supra* ¶49.

129. Close proximity is also within a limited range through a corresponding direct link. *See* Exh. 1001, 15:61-63. The cellular telephone of *Suga* and *Gorsuch* only has to be in the range to establish a network connection.

[E]ach wireless LAN hub 611 has a region of coverage 613A, 613 B. ...

The regions of coverage 613A, 613B are generally of the order of tens or hundreds of feet.”

Exh. 1006, 13.

130. A POSITA would know the range of coverage in a wireless network is for enabling multiple devices to make a connection with the network. A direct linked device must be closer to allow one device to connect directly with another. Further, the specification highlighted a difference between a network-connected device and a direct link-connected device. *See supra* ¶¶124-128.

131. It is my opinion that all of the claim elements of claim 8 are not found in the combination of *Suga* and *Gorsuch* because devices having a “direct link” have a communication link not connected to network devices, and close proximity requires the directly linked devices to be near to each other and less than tens of or hundreds of feet apart.

10. Claim 9 – “A cellular phone as defined in claim 8, wherein said second data transceiver comprises a communication network transceiver for wireless communication through a communication network that represents said second communication link, with one of a remote portable electronic device, a remote server, a remote terminal and a combination thereof.”

132. Claim 9 is a dependent claim and incorporates all the elements of claims 1 and 8.

133. All the elements of claims 1 and 8 are not disclosed in the combined *Suga* and *Gorsuch* patents, such as the “activation cue” and “switching element.”. *See supra* ¶¶71-100; 122-131.

134. It is my opinion that all of the claim elements of claim 9 are not found in the combination of *Suga* in view of *Gorsuch*.

11. Independent claim 10

a. [10.a] “an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;”

135. As previously discussed, the combination of *Suga* in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶ 71-100.

- b. [10.b] “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 triggered by the user;”**

136. As previously discussed, the combination of *Suga* in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶76-86.

- c. [10.d] “a first data transceiver operatively linked to said electronic circuit, said first data transceiver being operable for data exchange over a first communication link;”**

137. As previously discussed, the combination of *Suga*, in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶84-85.

- d. [10.e] “a second data transceiver operably linked to said electronic circuit, said second data transceiver being operable for data exchange over a second communication link that is distinct from said first communication link;”**

138. As previously discussed, the combination of *Suga*, in view of *Gorsuch*, does not describe this claim element. *See supra* ¶88.

- e. **[10.f] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from a source external to said cellular phone; and”**

139. As previously discussed, the combination of *Suga*, in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶89-92.

- f. **[10.h.i] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if an activation cue was received by said cue receiver, said electronic circuit will accomplish said first data conveyance operation to convey data from said electronic circuit to said first data transceiver for transmitting data through said first data transceiver; and”**

140. As previously discussed, the combination of *Suga*, in view of *Gorsuch*, does not describe this claim element. *See supra* ¶99.

- g. **[10.h.ii] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if no activation cue was received by said cure receiver, said electronic circuit will accomplish said second data conveyance operation to convey data from said electronic circuit to said second data transceiver for transmitting data through said second data transceiver.”**

141. As previously discussed, the combination of *Suga*, in view of *Gorsuch*, does not describe this claim element. *See supra* ¶100.

142. It is my opinion that an activation cue and invariable activation command are not described in the combination of *Suga*, in view of *Gorsuch*.

12. Independent claim 11

- a. [11.c.i] “an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;”**

143. As previously discussed, the combination of *Suga* in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶ 71-75.

- b. [11.c.ii] “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;”**

144. As previously discussed, the combination of *Suga* in view of *Gorsuch*, does not describe this claim element. *See supra* ¶¶ 76-86.

- c. **[11c.iii] “a first data transceiver operatively linked to said electronic circuit, said first data transceiver being for exchanging data between said electronic circuit and said first data exchange device through a direct link;”**

145. An “activation cue” and a “direct link” are not described in the combination of *Suga* in view of *Gorsuch* as discussed for independent claim 1 and dependent claim 8. *See supra* ¶¶ 124-131.

146. In my opinion, at least the direct link is not described in the combination of *Suga* and *Gorsuch*.

- d. **[11(c)(iv)] “a second data transceiver operatively linked to said electronic circuit, said second data transceiver being for exchanging data between said electronic circuit and said second data exchange device through a communication network that is distinct from said direct link;”**

147. An “activation cue” and “direct link” are not described in the combination of *Suga* in view of *Gorsuch* as discussed for independent claim 1 and dependent claims 8 and 9. *See supra* ¶¶ 132-124.

148. In my opinion, at least the direct link is not described in the combination of *Suga* and *Gorsuch*.

- e. **[11.c.v] “a cue receiver operatively linked to said electronic circuit for receiving an activation cue from said first data exchange device;”**

149. An “activation cue” and “direct link” are not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim element [1.e]. *See supra* ¶¶ 89-92.

150. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

- f. **[11.c.vi] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being assigned a first state upon an activation cue having been received by said cue receiver, and being assigned a second state when no activation cue was received by said cue receiver; and”**

151. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim element [1.f]. *See supra* ¶¶ 94-98.

152. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

- g. [11.c.viii.A] “wherein upon said control device being selectively triggered by the user to issue said invariable activation command: if said switching element is in said first state, a first data conveyance operation will be initiated through the instrumentality of said first data transceiver for exchanging data between said electronic circuit and the first external data exchange device; and”**

153. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim element [1.h.i]. *See supra* ¶99.

154. In my opinion, at least the “direct link” is also not described in the combination of *Suga* and *Gorsuch*.

- h. [11(c)(viii)(B)] “if said switching element is in said second state, a second data conveyance operation will be initiated through the instrumentality of said second data transceiver for exchanging data between said electronic circuit and the second external data exchange device.”**

155. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim element [1.h.ii]. *See supra* ¶100.

156. In my opinion, an “activation cue” and “direct link” is not described the combination of *Suga* in view of *Gorsuch*.

157. It is also my opinion that all elements of independent claim 11 are not disclosed by the combination of *Suga* in view and *Gorsuch*.

13. Independent claim 12

- a. [12.pre] “A method for data conveyance with a cellular phone of the type 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, first and second data transceivers operatively linked to said electronic circuit, a cue receiver operatively linked to said electronic circuit, a data conveyance switching element operatively linked to said electronic circuit and capable of being in either one of a first and a second state, and power means for providing power to said cellular phone, said method comprising the steps of:”

158. The “electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output” claim element is addressed previously in claim 1 elements and not described in the combination of *Suga* and *Gorsuch*. See *supra* ¶¶ 71-101.

- b. [12.a] “awaiting for an activation cue to be received at said cue receiver;”

159. An “activation cue” and “direct link” are not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim element [1.e]. See *supra* ¶¶ 89-92.

160. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

- c. [12.b] “if an activation cue is received at said cue receiver, assigning said first state to said switching element, while if no activation cue is received at said cue receiver, assigning said second state to said switching element; and;”

161. An “activation cue” is not described in *Suga* in view of *Gorsuch* as discussed for claim element [1.f]. *See supra* ¶¶94-98.

162. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

- d. [12.c] “a user selectively triggering said control device to issue an invariable activation command whereby: if said switching element is in said first state, forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device over a first communication link; and”

163. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim elements [1.b], [1.h.i], and [1.h.ii]. *See supra* ¶¶76-86, 99, and 100.

164. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

165. It is my opinion that the combination of *Suga* and *Gorsuch* fail to teach or describe at least one of the claim elements of claim 12.

Claim 13 – “A method as defined in claim 12, further comprising the following step before the step of forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device:

forwarding third data to and displaying said third data on a display screen provided on said cellular phone, wherein said third data is representative of the content of said first data.”

166. Claim 13 is a dependent claim and incorporates all the elements of independent claim 12. *See supra* ¶¶158-165. The combined *Suga* and *Gorsuch* references do not disclose all the elements of independent claim 12. *See supra* ¶¶158-165.

167. The first data transceiver is exchanging data with an external data exchange device. An external data exchange device is a node in a network where data originates or terminates as described in the specification and figures of the '294 Patent (*see* Exh. 1001, FIGs. 1-4). In the specifications and figures, especially in Figure 3, a remote portable electronic device communicates through a network. A POSITA would understand network hardware, such as an access point or base station, which is part of network 106. The claim element requires “initiating a data exchange

operation with a first external data exchange device, not a network infrastructure device that simply routes the data to the first external data exchange device. *See* Exh. 1001, FIG. 3.

168. It is my opinion that all of the claim elements of claim 13 are not found in the combination of *Suga* in view of *Gorsuch* references.

14. Claim 14 – “A method as defined in claim 13, wherein after the step of forwarding said third data to the display screen, the method comprises the following step:

awaiting for an authorization command to be inputted through a user confirmation input device provided on said cellular phone before forwarding said first data to said first data transceiver.”

169. Claim 14 is a dependent claim and incorporates all the elements of claims 12 and 13.

170. The combined *Suga* and *Gorsuch* references do not disclose all the elements of independent claim 12 and dependent claim 13. *See supra* ¶¶158-165, 167-168.

171. Petitioner’s expert’s unsupported assertions in the Petition are all that is provided for this element, and it makes no sense:

Suga in combination with *Gorsuch* teaches this element. ... *Suga* does not disclose the process to initiate sending an email, but these processes were well known in the art. A POSITA **would have interpreted *Suga***

to teach or suggest that the email is displayed by the LCD panel until a user wishes to send the email. **A POSITA would further have interpreted Suga to teach or suggest waiting for user authorization** before sending the email. Namely, once the user desires the email to be sent, the user presses a button on the keyboard 39. It was established in the art that this can trigger a confirmation message, where the device waits for further input from a user before sending the email. See Ex. 1010, [0032]-[0037], Figs. 4 and 5 (describing a user pressing a key to send an email, a confirmation option message being presented alongside the email, and a user optionally confirming the user wishes to send the email); Sorotzkin, 4:34-49 (describing that after clicking the send button, a confirmation dialog is presented to the user, allowing the user an additional option to send or not send the email); Meister, 3:14-56 (describing a user requesting a message to be sent, a dialog box is displayed to the user in response, providing the user the options to send, modify, or erase the email). Finally, if a user confirms they wish the email to be sent, the email is forwarded by the MPU 40 to the relevant transceiver. When a confirmation is required, the email is not sent to any transceiver prior to receipt of the user confirmation. After pressing the initial send button, the device is “awaiting for an authorization command[,]” waiting for the user to confirm they want to send the email.

See Exh. 1004, ¶145 (emphasis added).

172. Neither the combination of *Suga* or *Gorsuch* teach or even mention authorization as a security measure as claimed in the '294 Patent. A POSITA knows security authorization is not found in an email application. Having to enter a PIN every time you access an email or send an email would be detrimental to an email application. But that is exactly what Petitioner's expert asserts.

173. If the Board accepted such an interpretation, then this operation would be a significant reason not to combine the teachings of the combination of *Suga* and *Gorsuch* because *Gorsuch* is directed toward selecting a network for carrying data, not an email application that requires every data transfer to be authenticated.

174. The '294 patent uses authentication, i.e., the entry of a PIN after an activation command and reception of the "activation cue" for security, and not as confirmation of sending every email or piece of data from a handheld device.

175. 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*).

176. The Petition is void of any facts from the references or the Petitioner's expert support to explain why a POSITA would believe "confirmation" is equivalent to "authorization," as none can be made. The '294 Patent is directed towards an approach for securely transferring data rather than an application for generating transferred data, such as an email, word processor, spreadsheet, or other data creation application, and a POSITA would understand the difference.

177. The '294 Patent explains triggering control device 114 "may be accomplished by entering a PIN code (security data), pressing an authorization button, ... or the like." Exh. 1001:14-18. Security data is entered for authorization.

178. It is my opinion that all of the claim elements of claim 14 are not found in the combination of *Suga* and *Gorsuch* references.

15. Claim 15 – "A method as defined in claim 12, wherein said first and second data are identical."

179. Claim 15 is a dependent claim and incorporates all the elements of independent claim 12.

180. All the elements of claim 12 are not disclosed in the combination of *Suga* and *Gorsuch* references. *See supra* ¶¶ 158-165.

181. It is my opinion that all of the claim elements of claim 15 are not found in the combination of *Suga* and *Gorsuch* references.

16. Claim 16 – “A method as defined in claim 12, wherein said first data transceiver is a proximity transceiver and the step of forwarding said first data to said first transceiver is for initiating a wireless data exchange operation with a proximate first external data exchange device through a direct link representing said first communication link where the cellular phone is conveyed toward a close proximity of the first external data exchange device and within a range to receive the activation cue to initiate the wireless data exchange.”

182. Claim 16 is a dependent claim and incorporates all the elements of independent claim 12.

183. All the elements of claim 12 are not disclosed in the *Suga and Gorsuch* references. *See supra* ¶¶ 158-165.

184. The Petition only cites claim 5, which is a dependent claim of independent claim 1. Petitioner’s expert does not discuss claim 16 at all. Independent claim 12 elements are not addressed or cited in the Petition for dependent claim 16.

185. It is my opinion that all of the claim elements of claim 16 are not found in the combination of *Suga* and *Gorsuch* references, including a “direct link,” and “close proximity of the first external data exchange device.”

17. Claim 17 – “A method as defined in claim 12, wherein said second data transceiver is a communication network transceiver and the step of forwarding said second data to said second data transceiver is for initiating a wireless data conveyance operation through a communication network representing said second communication link, with one of a remote portable electronic device, a remote server, a remote terminal and a combination thereof.”

186. Claim 17 is a dependent claim and incorporates all the elements of independent claim 12.

187. All the elements of claim 12 are not disclosed in the combination of *Suga* and *Gorsuch* references. *See supra* ¶¶ 158-165.

188. The Petition only cites claim 6, which is a dependent claim of independent claim 1. Petitioner’s expert does not discuss claim 17 at all. Independent claim 12 elements are not addressed and are not cited in the Petition at all.

189. It is my opinion that all of the claim elements of claim 17 are not found in the combination of *Suga* and *Gorsuch* references, including a “direct link,” and “close proximity of the first external data exchange device.”

18. Claim 18 – “A method as defined in claim 12, wherein the step of selectively triggering said control device to issue the invariable activation command comprises selectively triggering one of the manually activated button, the keypad for receiving a PIN code, the biometric parameter detector and a combination thereof.”

190. Claim 18 is a dependent claim and incorporates all the elements of independent claim 12.

191. All the elements of claim 12 are not disclosed in the *Suga and Gorsuch* references. *See supra* ¶¶ 158-165.

192. The Petition only cites claim 4, which is a dependent claim of independent claim 1. Petitioner’s expert does not discuss claim 18 at all. Independent claim 12 elements are not addressed and are not cited in the Petition at all.

193. It is my opinion that all of the claim elements of claim 18 are not found in the combination of the combination of *Suga* and *Gorsuch* references, including a “direct link,” and “close proximity of the first external data exchange device.”

19. Independent Claim 19

- a. [19.pre] “A method for data conveyance with a cellular phone of the type comprising: an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output, a control device operatively linked to said electronic circuit, first and second data transceivers operatively linked to said electronic circuit, a cue receiver operatively linked to said electronic circuit, a data conveyance switching element operatively linked to said electronic circuit and capable of being in either one of a first and a second state, and power means for providing power to said cellular phone, said method comprising the steps of:”

194. The “an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output” claim element is addressed previously in independent claims 1 and 12 elements and are not described in the combination of *Suga* and *Gorsuch*. See *supra* ¶¶ 71-101, 158.

- b. [19.a] “awaiting for an activation cue to be received at said cue receiver;”

195. An “activation cue” and “direct link” are not described in the combination of *Suga* in view of *Gorsuch* as discussed for claim elements [1.e] and [12.a]. See *supra* ¶¶ 89-92, 159-160.

196. In my opinion, at least the direct link is not described in the combination of the combination of *Suga* and *Gorsuch*.

- c. **[19.b] “if an activation cue is received at said cue receiver, assigning said first state to said switching element, while if no activation cue is received at said cue receiver, assigning said second state to said switching element; and”**

197. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed claim element [1.f], [12.b]. *See supra* ¶¶94-98, 161-162.

198. In my opinion, at least the “direct link” is not described in the combination of *Suga* and *Gorsuch*.

- d. **[19.c, 19.c.i, 19.c.ii] “selectively triggering said control device to issue an invariable activation command whereby: if said switching element is in said first state, forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device over a first communication link; and if said switching element is in said second state, forwarding second data to said second data transceiver for initiating a data exchange operation with a second external data exchange device over a second communication link that is distinct from said first communication link;”**

199. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed claim elements [1.b], [1.h.i], and [1.h.ii]. *See supra* ¶¶76-8699-101, 163-165.

200. Furthermore, the data is sent to an external data exchange device, which is not a device that supports the network infrastructure for network 103 of the '294 Patent. *See supra* ¶167.

201. It is my opinion that the combination of the combination of *Suga* and *Gorsuch* fails to teach or describe at least one of the claim elements.

- e. **[19.d.i] “wherein said method further comprises the following steps before the step of forwarding first data to said first data transceiver for initiating a data exchange operation with a first external data exchange device:”**
- f. **[19.d.ii] “forwarding third data to and displaying said third data on a display screen provided on said cellular phone, wherein said third data is representative of the content of said first data; and”**

202. An “activation cue” is not described in the combination of *Suga* in view of *Gorsuch* as discussed claim elements [1.b], [1.h.i], and [1.h.ii]. *See supra* ¶¶76-86, 99, and 101.

203. Furthermore, the data is sent to an external data exchange device, which is not a device that supports the network infrastructure for network 103 of the '294 Patent. *See supra* ¶167.

204. It is my opinion that the combination of *Suga* and *Gorsuch* fails to teach or describe at least one of the claim elements.

- g. [19.e.ii] “awaiting for an authorization command to be inputted through said user confirmation input device before forwarding said second data to said second data transceiver.”

205. Furthermore, the data is sent to an external data exchange device by the second data transceiver, not to a network infrastructure device for network 103 of the '294 Patent. *See supra* ¶167.

206. It is my opinion that the combination of *Suga* and *Gorsuch* fails to teach or describe at least one of the claim elements.

20. Claim 20 – “wherein said control device includes said user confirmation input device.”

207. Claim 20 is a dependent claim and incorporates all the elements of claim 19.

208. All the elements of claim 19 are not disclosed in the combination of *Suga* and *Gorsuch*. *See supra* ¶¶ 194-206. See also claim 14. *See supra* ¶¶169-178.

209. It is my opinion that the combination of *Suga* and *Gorsuch* fails to teach or describe at least one of the claim elements.

This is the END of my Declaration.

210. In signing this Declaration, I recognize that the Declaration may be filed as evidence in a contested case before the PTAB. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will cooperate to the best of my ability to appear for cross-examination during the time allotted.

211. I reserve the right to supplement my opinions in the future to respond to any arguments that the Petitioner raises and to take into account new information as it becomes available to me.

212. I declare that all the statements made in this Declaration are of my own knowledge and true; that all statements made on information and belief are believed to be true; and further that these statements herein were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

213. I declare to the best of my ability under the penalty of perjury that all statements made in this Declaration are true and correct.

DECLARATION OF SAFWAN ZAHEER
IN OPPOSITION TO PETITION FOR
IPR2025-00172, U.S. PATENT NO. 9,022,294

Executed: April 15, 2025, in Glenn Mills, Pennsylvania.

/Safwan Zaheer/ 
Safwan Zaheer

APPENDIX A

GLOBAL FINTECH, PAYMENTS, & LENDING EXECUTIVE

Delivering market leadership through bold strategy, operational excellence, and transformative product & tech solutions.

FinTech executive with 20+ years of driving market-leading growth, product innovation, and operational excellence across global banks, PE/VC-backed FinTechs, and professional services firms. Deep expertise in Payments, Lending, Credit Cards, BNPL, Wallets, and Merchant Checkout - scaling businesses, launching industry-first solutions, and winning in competitive markets.

Known for building high-performing teams, delivering multi-\$M revenue growth, and launching industry-first products, I bring a unique blend of strategic vision, technical expertise, and hands-on execution to drive long-term market success.

CORE EXPERTISE & SKILLS

- ✓ **Product Leadership:** Designed and launched industry-first products like AI-driven lending platforms, Credit Cards, Installment Loans/ BNPL, and neobanks, delivering double-digit growth and setting new benchmarks for customer experience and operational efficiency.
- ✓ **Strategic Growth Enablement:** Spearheaded business strategies, GTM plans, and digital roadmaps that unlocked new revenue streams and expanded market share. Successfully exited a FinTech firm at a multi-\$M valuation through strategic positioning and execution.
- ✓ **Business Performance:** Owned E2E business performance, driving revenue, customer adoption, and operations KPIs. Partnered with sales, marketing, finance, risk, compliance, and cross-functional teams to set goals, secure buy-in, and execute key metrics. Used data-driven insights to build SLAs and deliver measurable results.
- ✓ **Digital Transformation:** Led enterprise-wide modernization driving revenue growth and enhanced customer experience through AI, cloud, and automation. Delivered 20-30% efficiency gains via process optimization, data analytics, and automation workflows, while maintaining risk controls and regulatory compliance.
- ✓ **Leadership & Change Management:** Built and led high-performing, cross-functional teams, fostering a culture of agility, innovation, and customer first mindset across complex, matrixed organizations.

Cross-Functional Team Leadership • GTM • Digital Transformation • FinTech • Product Development • Program Management • Core Banking • SDLC • POS • LOS • KYC/AML • A/B Testing • AI & Automation
Data Analytics • Business Case/ROI • Strategic Partnerships • Executive Presence • SaaS • Customer Experience

PROFESSIONAL EXPERIENCE

autoMHatic Financial: PE backed Fintech Lender focused on Manufactured Home Loans. Exiting via M&A.
Philadelphia, PA 2024-2025

CHIEF PRODUCT OFFICER

- **Strategic Exit:** Partnered with PE investors and CEO to enhance asset value through launch of AI-driven Lending product, Tech automation, and 25% growth in Loan Originations leading to an exit via M&A (2025).

- **AI-Driven Product:** Launched industry-first “Instant Decision” product, delivering full loan approvals in minutes, increasing approval rates 35% to 45% (+70% w/counter-offers), and modern LOS & POS for originations efficiency.
- **Data Modernization:** Spearheaded migration from legacy Data Warehouse to modern, cloud-based platform, driving data efficiency, enhanced security, and +20% cost savings while enabling agile, scalable analytics.
- **Growth Leadership:** Drove 25% growth in loan originations to \$100M+ annually, improved funding speed by 20%, and enhanced operational efficiency through automation and digital solutions – while maintaining risk controls.
- **Strategic Partnerships:** Partnered with an AI firm to develop a blockchain-based E2E Loan Performance product, eliminating investor data verification issues and boosting capital markets efficiency.

HUNDREDDX: *Advisory Firm for Banks, Payment Networks, and Fintech.*
Philadelphia, PA

2019-2023

MANAGING DIRECTOR

- **Neobank Launch:** Led the US launch of T-Mobile MONEY, a revolutionary neobank, scaling to 250K+ active consumers and delivering a seamless, customer-first digital experience.
- **BNPL & POS Lending Growth:** Designed and launched installment lending, payments, BNPL products, forged Bank and payment network partnerships to drive 30% adoption growth for FinTech clients.
- **Strategic Advisory:** Advised clients on digital transformation, product innovation, and GTM strategies, resulting in marked increases in profitability and market share.

LENDINGPOINT: *FinTech Lender focused on Personal and POS Loans.*
Kennesaw, GA/New York, NY

2021-2022

EXECUTIVE VICE PRESIDENT AND GENERAL MANAGER, POS LENDING

- **Scaled POS Lending Business:** Grew funded volume from \$90M to \$250M annually across Dental, Elective Medical, and Home Improvement verticals, achieving record-high +20% net margins.
- **Embedded Finance Products:** Launched B2B and B2B2C embedded finance products, including installment loans inside of Invisalign’s mobile app (120M+ consumers) and BNPL solutions at 2500 merchant checkouts.
- **Operational Transformation:** Increased share-of-wallet from 1.5% to 8% through data-driven pricing, UI/UX enhancements, and hypothesis-driven A/B testing.

BM TECHNOLOGIES, formerly BankMobile (via HUNDREDDX): *FinTech Banking-as-a-Service (BaaS) Provider*
Philadelphia, PA

2019-2021

HEAD OF PRODUCTS

- **Neobank Product Launch:** Launched T-Mobile MONEY, led E2E product execution, core banking integrations (FIS), fraud prevention, KYC/AML, and ACH, maintaining compliance and risk controls and a seamless UI/UX.
- **GTM Execution:** Served as crucial bridge with T-Mobile, Bank partners, vendors, and marketing teams executing on GTM plan helping to scale the neobank to 250K+ active consumers.

KPMG US
New York, NY

2016-2019

HEAD OF FINTECH

- **Strategic vision:** Built KPMG’s US FinTech service line from scratch, performed effectively as an active member of Global FinTech leadership team, growing consulting practice to \$5M in yearly revenues.
- **Digital Banking Transformation:** Spearheaded launch of a digital banking platform for Top 20 Bank, achieving +\$M in deposit volume and serving 15M+ consumers.

- **Client Growth:** Increased customer retention by 35% and transaction volume by 45% for a credit card firm through the launch of FinTech-like credit and debit card products.

ACCENTURE

Philadelphia, PA

2015-2016

DIRECTOR, DIGITAL PAYMENTS

- **Payments Growth:** Delivered high-impact digital payments, transformation, strategy and product development services to Financial Services and Retail clients, increasing company brand reputation and repeat business.
- **Payments Wallet:** Introduced a Payments Wallet and Merchant Commerce Portal for a Fortune 6 Retailer, driving \$250M+ in payment volume within 5 years.

BARCLAYS US

Wilmington, DE

2012-2015

DIRECTOR, DIGITAL PAYMENTS PRODUCTS

- **Mobile Payments Leadership:** Launched a Mobile Payments Wallet for consumers and SMBs, achieving \$500K in transaction volume and 25+ merchant partnerships. Later white-labeled for co-brand credit card partnerships.
- **Strategic Partnerships:** Partnered with Google Wallet and Mastercard to achieve “top of wallet” exposure for co-brand credit cards.

Addition Experience as Strategy Consultant in Peppers & Rogers Group; Sr. Manager/ Product Manager (Mobile Products) and Wireless Engineer in Nokia/ Alcatel-Lucent. (2001-2011)

BOARD & ADVISORY ROLES: Fiat Growth (2023-Present), NewChip Accelerator (2022-2023), Blockchain Founders Fund (2020-Present), LOYYAL Inc. (2016-2018).

EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge MA

- Master of Science in Engineering and Management

Texas A&M University, College Station TX

- Master of Science in Electrical Engineering
- Bachelor of Science in Electrical Engineering (Cum Laude)

****Listed on 3 U.S. Patents.***