

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

DH INTERNATIONAL LTD.,
Patent Owner.

PTAB Case No. IPR2024-01321

Patent No. 7,628,333

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 35 U.S.C. § 42.107**

December 26, 2024

TABLE OF CONTENTS

TABLE OF AUTHORITIES	vi
TABLE OF EXHIBITS	vii
I. INTRODUCTION	1
II. MANDATORY NOTICES (37 C.F.R. § 42.8)	1
A. Real Party in Interest	1
B. Related Matters	1
C. Counsel and Service Information	2
D. 37 C.F.R. § 42.28(b)(4): Service Information	4
III. PETITIONER’S PROCEDURAL ERRORS	5
A. All of the Grounds Improperly Rely on Additional References Not Listed in the Grounds	5
1. Ground 1 improperly relies on <i>Shogase</i> and <i>Fare</i> that are not part of Ground 1	5
2. Grounds 2 and 3 improperly incorporate arguments from Ground 1 that rely on <i>Shogase</i>	7
B. The Petition must specify where each element of the claim is found in the prior art	7
C. Conclusory Expert Declarations are Entitled to Little or No Weight	8
IV. BACKGROUND OF U.S. PATENT NO. 7,628,333	9
V. PERSON OF ORDINARY SKILL IN THE ART	11
VI. THE CHALLENGED CLAIMS	11
VII. CLAIM CONSTRUCTION	12
A. Claim Construction Standard	12

B.	The term “activation cue” should be construed as a “a unique indicator.”	12
VIII.	OVERVIEW OF THE PRIOR ART	13
A.	Ong (Exh. 1005).....	13
B.	Hoff (Exh. 1006)	14
C.	Palmer (Exh. 1007).....	15
D.	Rolf (Exh. 1007).....	16
IX.	RESPONSE TO SPECIFIC IPR GROUNDS	16
E.	GROUND 1: Obviousness Based on <i>Ong</i> and <i>Hoff</i>	16
1.	No Motivation to Combine	17
2.	Independent Claim 1	23
a.	[1.b] “a control device operatively linked to said electronic circuit, with an invariable activation command being issued when said control device is selectively triggered”	24
b.	[1.d.ii] “said data transceiver being ... for receiving a selectively emitted activation cue from a source external to said portable electronic device”.....	29
c.	[1e] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being in an activated state upon an activation cue having been received by said data transceiver, and being in an inactive state when no activation cue was received by said data transceiver” ...	32
d.	[1.g.i] “wherein upon said control device being selectively triggered to issue [sic] invariable activation command: if said switching element is in said activated state, a data exchange will be initiated through the instrumentality of said data transceiver for exchanging data between said electronic circuit and an external data exchange device.”	35

e.	[1.g.ii] “wherein upon said control device being selectively triggered to issue [sic] invariable activation command: if said switching element is in said inactive state, data will be conveyed from said electronic circuit to said user interface device for communicating information to the portable electronic device holder”	36
3.	Claim 2 – “A portable electronic device as defined in claim 1, wherein said user interface device is a display screen”	39
4.	Claim 3 – “A portable electronic device as defined in claim 1, wherein said user interface device is a display screen.”	39
5.	Claim 4 – “A portable electronic device as defined in claim 1, wherein said control device is a biometric parameter detector.”	39
6.	Claim 6 – “A portable electronic device as defined in claim 1, wherein said control device is a manually activated button, and whereby said control device is triggered when the button is pressed.”	40
7.	Claim 7 – “A portable electronic device as defined in claim 1, wherein said electronic circuit comprises said switching element.”	40
8.	Claim 8 – “A portable electronic device as defined in claim 7, wherein said electronic circuit comprises a microchip, and wherein said switching element is a series of instructions programmed onto said microchip.”	41
9.	Claim 9 – “A portable electronic device as defined in claim 1, wherein said switching element comprises a logical circuit.”	42
10.	Independent claim 11	42
a.	[11.pre.v]: “communication ports operatively link to said circuit”	42

b.	[11.pre.vi]: “a switching element operatively linked to said electronic circuit and being in a default inactive state”	43
c.	[11.a]: “awaiting for an activation cue to be received at a predetermined one of said communication ports” ...	44
d.	[11.b]: “if an activation cue is received at one of said communication ports, changing the state of said switching element from its default inactive state to and activated state”	44
e.	[11.d]: “if said switching element is in its activated state, initiating a data exchange with an external data exchange device through at least one of said communication ports”	45
f.	[11.e]: “if said switching element is in its inactive state, conveying data from said electronic circuit to said user interface device for communicating information to the portable electronic device holder” ...	46
11.	Claim 12 – “A method as defined in claim 11, wherein said activation cue is received at one of said communication ports distinct from another one of said communication ports used for data exchange with the external data exchange device”	46
12.	Claim 13 – “A method as defined in claim 11, wherein the additional following step occurs after selectively triggering said control device if said switching element is in said activated state: conveying data from said electronic circuit to said user interface device for communicating information to the portable electronic device holder”	47
F.	GROUND 2: Obviousness Based on <i>Ong, Hoff, and Palmer</i>	47
1.	No Motivation to Combine	47
2.	Claim 5 – “A portable electronic device as defined in claim 4, wherein said biometric parameter detector is a fingerprint scanner capable of obtaining a fingerprint scan, and whereby said control device is triggered when the	

	fingerprint scan matches a fingerprint image pre-saved in said electronic circuit”	48
G.	GROUND 3: Obviousness Based on <i>Ong, Hoff, and Rolf</i>	48
1.	No Motivation to Combine	48
2.	Independent Claim 10	49
a.	[10.g]: “A data conveyance switching element operatively linked to said second electronic circuit, and switching element being in an activated state upon an activation cue having been received by said second data transceiver, and being in an inactive state when no activation cue was received by said second data transceiver	49
b.	[10.i.i]: “wherein upon said control device being selectively triggered to issue said invariable activation command: if said switching element is in its activated state, a data exchange will occur between said first data transceiver and said second data transceiver, thereby exchanging data between said data exchange device and said portable electronic device”	50
c.	[10.i.ii]: “wherein upon said control device being selectively triggered to issue said invariable activation command: ... if said switching element is in its inactive state, data is forwarded to said user interface device for communicating information to the portable electronic device holder”	51
X.	SECONDARY CONSIDERATIONS	51
	CONCLUSION	52
	CERTIFICATE OF SERVICE	a
	CERTIFICATE OF COMPLIANCE	b

TABLE OF AUTHORITIES

Cases

<i>Anderson v. Eppstein</i> , 59 USPQ2d 1280 (BPAI 2001).....	8
<i>Apple Inc. v. Qualcomm Inc.</i> , IPR2018-01276, 2020, Pat. App. LEXIS 7895 (PTAB Feb. 3, 2020).....	8
<i>Koninklijke Philips N.V. v. Google LLC</i> , 2019-1177, 10 (Fed. Cir. Jan. 30, 2020)	5, 23
<i>Novartis AG v. Torrent Pharms.</i> , 853 F.3d 1316 (Fed. Cir. 2017).....	8
<i>Trading Techs. Int'l, Inc. v. IBG LLC</i> , 921 F.3d 1378 (Fed. Cir. 2019).....	7
<i>United States v. Dunkel</i> , 927 F.2d 955 (7th Cir. 1991).....	8
<i>Xerox Corp. v. Bytemark, Inc.</i> , IPR2022-00624 (PTAB Feb. 10, 2023)	8

Statutes

35 U.S.C. § 282(b)	12, 13
--------------------------	--------

Regulations

37 C.F.R. § 42.100	12, 13
37 C.F.R. § 42.104	7, 13
37 C.F.R. § 42.107	1
37 C.F.R. § 42.65	8, 9

TABLE OF EXHIBITS

Exhibit	Title
1001	U.S. Patent No. 7,628,333 to Gaillard <i>et al.</i> (“333 Patent”)
1002	Prosecution History of U.S. Application No. 10/552,912
1003	Declaration of Stuart Lipoff (“ <i>Lipoff</i> ”)
1004	Curriculum Vitae of Stuart Lipoff
1005	U.S. Patent No. 7,278,581 to Ong <i>et al.</i> (“ <i>Ong</i> ”)
1006	PCT International Publication No. WO 1990/013096 A1 to Hoff <i>et al.</i> (“ <i>Hoff</i> ”)
1007	U.S. Patent No. 7,337,326 to Palmer <i>et al.</i> (“ <i>Palmer</i> ”)
1008	U.S. Patent No. 7,376,583 to Rolf <i>et al.</i> (“ <i>Rolf</i> ”)
1009	John McCrindle, Smart Cards, (Springer Verlag, 1990) (“ <i>McCrindle</i> ”)
1010	U.S. Patent No. 6,257,486 to Teicher <i>et al.</i> (“ <i>Teicher</i> ”)
1011	Hiro Shogase, The Very Smart Card: A Plastic Pocket Bank, IEEE Spectrum, October 1988 (“ <i>Shogase</i> ”)
1012	U.S. Patent No. 7,136,623 to Fare <i>et al.</i> (“ <i>Fare</i> ”)
1013	U.S. Patent No. 7,440,771 to Purk (“ <i>Purk</i> ”)
1014	U.S. Patent Pub. No. 2004/0117262 to Berger <i>et al.</i> (“ <i>Berger</i> ”)
1015	<i>DH International Ltd v. Google LLC</i> , No. 1-23-cv-01116, Order Dismissing Case (WDTX December 15, 2023)
2001	Declaration of Safwan Zaheer

I. INTRODUCTION

Patent Owner DH International Ltd. (“DHI” or “Patent Owner”) submits the following Patent Owner Preliminary Response (“POPR”) pursuant to 37 C.F.R. § 42.107(a). *See also* 37 C.F.R. § 42.107(b). Petitioner Google LLC (“Google” or “Petitioner”) filed a Petition for *Inter Partes* Review of U.S. Patent No. 7,628,333 (the ‘333 patent”) on September 11, 2024. (IPR2024-01321, Paper No. 1 (“Petition”)).

Patent Owner respectfully requests that the Board deny institution of *Inter-Partes* Review because Google has failed to meet its burden to show a reasonable likelihood that at least one of the challenged claims is unpatentable. Specifically, Google has not demonstrated a reasonable likelihood that any claim of the ‘333 patent would be rendered obvious in view of any of the three (3) separate Grounds. Thus, institution of *Inter-Partes* Review of the ‘333 patent should be denied.

II. MANDATORY NOTICES (37 C.F.R. § 42.8)

A. Real Party in Interest

Patent Owner DH International Ltd. is the real party-in-interest.

B. Related Matters

Patent Owner notifies the Board of the following proceedings involving U.S. Patent No. 9,022,294 (“the ‘294 Patent”) that may affect or be affected by a decision in this proceeding:

- *DH International Ltd. v. Apple.*, N.D. CA, No. 3:23-cv-06185-TLT

U.S. Patent No. 9,022,294 is the subject of other *inter partes* review proceedings.

- Apple Inc., v. DH International Ltd., IPR2025-00172

The following IPR proceeding involves a different patent that also has been asserted in the above-identified litigation, and may affect, or be affected by, a decision in this proceeding:

- *Google LLC v. DH International Ltd.* IPR2024-01321, U.S. Patent No. 7,628,333, filed September 11, 2024; and
- *Apple Inc. v. DH International Ltd.* IPR2025-0173, U.S. Patent No. 7,628,333, filed December 3, 2024.

C. Counsel and Service Information

Counsel for DH International Ltd.	
Lead Counsel	Back-Up Counsel
Robert Hart Reg. No. 35,184 robert@addyhart.com ADDYHART P.C. 2025 Guadalupe Street Suite 260 Austin, TX 78705 949.337.0568 T	Meredith Martin Addy Reg. No. 37,883 meredith@addyhart.com ADDYHART P.C. 10 Glenlake Parkway Suite 130 Atlanta, Georgia 30328 312.320.4200 T

Counsel for DH International Ltd.	
Lead Counsel	Back-Up Counsel
312.264.2547 F	312.264.2547 F Gregory B. Gulliver Reg. No. 44,138 gbgulliver@addyhart.com ADDYHART P.C. 401 N. Michigan Ave. Suite 1200-1 Chicago, Illinois 60611 847.984.3020 T 312.264.2547 F

Counsel for Google LLC	
Lead Counsel	Back-Up Counsel
Erika H. Arner (Reg. No. 57,540) erika.arners@finnegan.com Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 1875 Explorer Street, Suite 800 Reston, VA 20190-6023 571.203.2700 T 202.408.4400 F	Kara A. Specht (Reg. No. 69,560) kara.specht@finnegan.com Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 271 17th Street, NW Suite 1400 Atlanta, GA 30363-6209 571.203.2700 T 404.653.6444 F Christopher B. Anderson (Reg. No. 77,898) christopher.anderson@finnegan.com

Counsel for Google LLC	
Lead Counsel	Back-Up Counsel
	Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 1875 Explorer St, Suite 800 Reston, VA 20190-6023 571.203.2700 T 202.408.4400 F Safiya Aguilar (Reg. No. 77,212) safiya.aguilar@finnegan.com Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 901 New York Avenue, NW Washington, DC 20001-4413 202.408.4000 T 202.408.4400 F

D. 37 C.F.R. § 42.28(b)(4): Service Information

DHI submitted its Mandatory Notices, Paper 4, and Power of Attorney, Paper

5. DHI also consents to electronic service directed to the following email address:

DHI-IPR@addyhart.com

III. PETITIONER'S PROCEDURAL ERRORS

E. All of the Grounds Improperly Rely on Additional References Not Listed in the Grounds

1. Ground 1 improperly relies on *Shogase* and *Fare* that are not part of Ground 1

The Petitioner must properly identify the references upon which each ground is based. Here, in addition to the prior art references listed in the asserted Grounds, Petitioner has improperly presented additional references that are not part of the asserted grounds in an attempt to improperly expand what is described within the four corners of cited patents. The Federal Circuit has ruled that, although the PTAB is not limited by the exact language of the petition, it does “not enjoy a license to depart from the petition and institute a different inter partes review of [its] own design.” *Koninklijke Philips N.V. v. Google LLC*, 2019-1177, 10 (Fed. Cir. Jan. 30, 2020).

Ground 1 sets forth only two references *Ong* and *Hoff*, but Petitioner also relies on third and fourth references. *See* Pet. 24 (relying on *Shogase* (Exh. 1011) and *see* Exh. 2001, ¶142 (relying on *Fare* (Exh. 1012)). Petitioner improperly relies on *Shogase* to attempt to broaden and further explain *Hoff*. Pet. 24. While *Hoff* does mention *Shogase*, it does not incorporate *Shogase* by reference. Therefore, *Shogase* is not part of the *Hoff* description beyond what is cited in *Hoff*. *Shogase* is not asserted by Petitioner to be part of Ground 1 and is not listed in the Overview of the Ground 1 Combinations. *Id.* 8-11. Therefore, it is improper for this reference to be

used in Ground 1 because it would be improper procedurally for the Board to institute on Ground 1 as doing so would expand beyond *Ong* and *Hoff*.

Similarly, the Petition improperly relies on *Fare*, a fourth reference, in Ground 1. Pet. 58. The *Fare* reference is directly cited for describing a “wireless communication port for communicating with self-service transactions terminal.” *Id.* *Fare* is not asserted by Petitioner as part of Ground 1 and it too is not listed in the Overview of the Ground 1 Combinations. *Id.* 8-11. Therefore, it is procedurally improper for the Board to institute on Ground 1 as doing so would expand beyond *Ong* and *Hoff*.

Further, even if the Board wanted to institute on Ground 1, the Petitioner has failed to meet their burden to present a motivation to combine *Ong*, *Hoff*, *Shogase*, and *Fare*. By improperly adding *Shogase* and *Fare* to Ground 1 without any mention in the Motivation to Combine section of the Petition (*See* Pet. 11-14).

In Ground 1, independent claim 1 relied on the four references. Dependent claims 4, 6-9 depend from tainted independent claim 1 element 1.e. Independent claim 11 incorporates tainted element 1.e’s arguments in element 11.pre.vi and additionally uses *Fare* in element 11.pre.v. Dependent claims 12-13 depend from independent claim 11 and are also tainted.

2. Grounds 2 and 3 improperly incorporate arguments from Ground 1 that rely on *Shogase*

Likewise, Grounds 2 and 3 rely on Ground 1 and are tainted by improperly citing the *Shogase* reference. In Ground 2, dependent claim 5 depends from dependent claim 4 and independent claim 1, so it is tainted by relying on *Shogase* in independent claim 1. Independent claim 10 in element 10.g incorporates the arguments from tainted element 1.e and is therefore also tainted.

F. The Petition must specify where each element of the claim is found in the prior art

The Petition fails to meet the requirements of 35 U.S.C. § 312(a) and 37 C.F.R. § 42.104(b)(4) because it lacks specificity as to where each element of the claims of the '333 patent is found in the relied upon prior art. String cites to multiple paragraphs in the references and Declaration are relied on throughout the Petition with little or no explanation of what those paragraphs teach or explain, and the Petition fails to provide quoted sections of the references to identify where and what is being relied on in a reference. *See e.g.*, Pet. 33 (Element 1(d)(ii)); Pet. 37 (Element 1(e)); Pet. 47(Claim 3).

Even assuming Petitioner has a viable theory, which it does not, Petitioner should have explained that theory in its Petition—a mere string citation is insufficient. *See, e.g., Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019) (holding that a conclusory assertion with no analysis

was not adequately developed); *Novartis AG v. Torrent Pharms.*, 853 F.3d 1316, 1326 n.2 (Fed. Cir. 2017) (finding that an argument presented in one conclusory sentence and a string cite was “far from sufficient to raise a meaningful challenge” and “amount[ed] to little more than a request that the Board peruse the cited evidence and piece together a coherent argument on Novartis’ behalf”).

Further, the Board has ruled in similar situations that “a string citation lacking any explanation whatsoever is imprecise and vague ... they are presented without explanation or further direction Judges are not like pigs, hunting for truffles buried in briefs; nor will we hunt for truffles buried in string citations, offered in briefs.” *Apple Inc. v. Qualcomm Inc.*, IPR2018-01276, Paper No. 32, 2020 Pat. App. LEXIS 7895, *15-16 (PTAB Feb. 3, 2020) (citing *Anderson v. Eppstein*, 59 USPQ2d 1280, 1287 (BPAI 2001) and *United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991)). Such is the situation here, as will be noted in detail below, for example Pet. 33 (Element 1(d)(ii)); Pet. 37 (Element 1(e); Pet. 47(Claim 3).

G. Conclusory Expert Declarations are Entitled to Little or No Weight

Finally, vague and conclusory expert declarations are entitled to little or no weight under 37 C.F.R. § 42.65(a). A recent precedential opinion issued from a *sua sponte* Director Review emphasizes this requirement. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper No. 12, at 4 (PTAB Feb. 10, 2023) (the expert declaration “merely repeats, *verbatim*, the conclusory assertion for which it is

offered to support” and therefore it is “entitled to little weight”) (citing 37 C.F.R. § 42.65(a)). Such is the case here; as will be noted in detail below, the expert declaration (Exh. 1002) parrots the same string cites and unsupported assertions found in the Petition. For example, when citing *Hoff* in the petition, a string cite made to “*Hoff*, 5:19-6:18, 8:22-9:1, 6:12-18.” Pet. 33, just parrots the same string cite and adds another “*id.*, 8:22-9:1” unexplained cite in addition to unsupported assertions found in the Petition. See Exh. 1003, ¶110; §VI.A.2.

IV. BACKGROUND OF U.S. PATENT NO. 7,628,333

The ’333 Patent, titled “Portable Electronic Device Capable of Alternate Data Conveyance Operations Responsive to an Invariable Activation Command,” issued on December 8, 2009, from a National Stage Filing of PCT/IB03/01523, filed on April 14, 2003. See Exh. 1001, cover page; 2001, ¶39.

The use of portable electronic devices such as electronic cards for security was known at the time of the ’333 Patent. What was not known, however, was that a switching element, used to switch from local access of stored data to the transmission of the stored data, is enabled by both user validation and “an activation cue.” Prosecution of the ’333 Patent further reinforced this novel and nonobvious characteristic. During prosecution, the patent applicant stated that:

Thus, the contact switch 24 of the card of [prior art]
document D1 has the effect of only activating the read

mode portion of the card, and has a quite different function than the control device¹ claimed in the present patent application, which must necessarily be triggered to initiate any data flow towards or out of the electronic circuit.

Exh. 1002, p. 218-219. Thus, as claimed in the '333 Patent, the stored data is not permitted to flow out of the electronic circuit without being triggered by both user validation (invariable activation command) and an activation cue to initiate a data flow. *See* Exh. 2001, ¶¶33-35.

Prior to the reception of an invariable activation command (such as validation) and an “activation cue,” the portable electronic device maintains “a first set of [stored] data ... in an inactive state.” Exh. 1001, 6:26. Upon receiving an invariable activation command (such as validation) and the “activation cue” by the control device, the accessible data is switched to a second set of data [by the switching element]. *See* Exh. 1001, 7:4-7. The “activation cue” is a predetermined indication for switching what data will be accessed. It is an indicator, “for example, a predetermined bit sequence.” Exh. 1001, 6:1-3; Exh. 2001, ¶¶36-37.

¹ A “control device can be any suitable device allowing the portable electronic device holder to selectively trigger a data conveyance operation.” Exh. 1001, 5:5-7.

In response to both (1) an invariable activation command and (2) an activation cue received from an external source, stored data may be transmitted by the portable electronic device. Upon the selective triggering of the control device to issue the invariable activation command and receipt of an activation cue by the cue receiver, the electronic circuit will accomplish the first data conveyance function; however, if no activation cue was received by the cue receiver, the electronic circuit will accomplish a second data conveyance function. *See* Exh. 1001, Abstract.

V. PERSON OF ORDINARY SKILL IN THE ART

Patent Owner agrees with Petitioner on the level of ordinary skill in the art. A person with ordinary skill in the relevant art at the time of invention—April 14, 2003—would have a bachelor’s degree in electrical engineering or a similar discipline and at least three 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. *See* Exh. 2001, ¶¶29-32.

VI. THE CHALLENGED CLAIMS

Petitioner challenges claims 1-13 of the ’333 patent. Of those, claims 1, 10, and 11 are independent. Each claim recites features distinguishing the ’333 patent from the asserted prior art, either directly or via dependency. Exh. 2001, ¶38.

VII. CLAIM CONSTRUCTION

H. Claim Construction Standard

In an *inter partes* review proceeding, “a claim of a patent ... shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b).

A. The term “activation cue” should be construed as a “a unique indicator.”

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.* The activation cue must be intended as a predetermined indicator and not a message or signal recognized as a message or signal for other action. *See* Exh. 2001, ¶¶49-52. The Petitioner has not provided any claim constructions for the “activation cue.” *See* Pet. 5-6.

Petitioner waived its right to make new claim construction arguments for additional claim terms by failing to include them in its Petition. Petitioner made no claim construction for “activation cue” and is now prevented from doing so. To the extent Petitioner states that no express construction is required and then later advocates for a specific interpretation during the course of any instituted IPR, such action would

be contrary to federal regulation, this Board’s guidelines, and settled law. *See* 37 C.F.R. § 41.104(b)(3) (“The statement [of relief requested] must identify ... [h]ow the challenged claim is to be construed.”); *Microsoft Corp. v. Uniloc*, IPR2019-01188, Paper 27 at 19, 2020 Pat. App. LEXIS 12698 (PTAB Nov. 4, 2020) (on reply, petitioner “cannot raise new claim construction issues that were not previously raised in its petition”) (quoting Consolidated Trial Practice Guide 44-45 (Nov. 2019) *available at* <https://www.uspto.gov/TrialPracticeGuide>).

Claims must be construed “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art *and the prosecution history pertaining to the patent.*” 37 C.F.R. § 42.100(b) (*emphasis added*) (citing 35 U.S.C. § 282(b)). Hence, all other claim terms should be given their plain and ordinary meaning as used in the ’333 patent specification and file history. If the Board does construe any other claim terms, Patent Owner reserves the right to provide constructions for those terms or other terms, if they become material to the Board’s decision.

VIII. OVERVIEW OF THE PRIOR ART

A. Ong (Exh. 1005)

Ong is a U.S. Patent, No. 7,278,581 (“Ong”) filed on October 15, 2002. *Ong* describes an Electronic Credit Card (ECC) device that enables transmission/reception of data and/or digital information to/from a host computer

via a Terminal Station (TS). The TS includes Teller Machines in supermarkets/shopping complexes, Automatic Teller Machines (ATM), EFTPOS devices and proprietary transceiver devices developed by Creative On-Line Technologies Limited for PC interface. *See* Exh. 1005, Abstract. The ECC has a timer for use when verifying a user's identity. *See* Exh. 1005, 1:62-64. A "disablement means for disabling use of the electronic credit card if a predetermined number of attempts verifying the identity of the user fail." Exh. 1005, 1:65-2:3. Further, "a unique authorization code is generated when the user's identity is verified." Exh. 1005, 1:54-55. The unique authorization code may be generated in synchronization with the TS. Exh. 1005, 2:4-6; Exh. 2001, ¶¶41-42.

Ong also describes the authentication of the ECC user, and, as part of that authentication for accessing the ECC, *Ong* may synchronize with the transaction station and conduct a transaction if verified. *Ong does not* address accessing selected data in the ECC after authentication and in response to a cue signal from a transaction station. Exh. 2001, ¶43.

B. Hoff (Exh. 1006)

*Hoff*², PCT International Publication No. WO 1990/013096 (Hoff), was filed

² Citing Hoff's page number is to the Exhibit page number and not the PCT page number.

on March 20, 1990. Hoff describes an electronic card approach using point-to-point radio communication. *See* Exh. 1006, p. 7, lines 15-17. “The point-to-point communication circuitry can be time slot protocol paging circuitry such as that in certain time slot protocol radio pagers.” Exh. 1006, Abstract. “The radio receiver 1 and the antenna 1a are built to receive messages or signals transmitted from commercial radio stations as an FM subcarrier in accordance with the time slot protocol.” Exh. 1006, p.10, lines 2-5. Hoff states that it can operate as a point-to-point pager. *See* Exh. 1006, pp. 15-16, lines 22-2. Further, using only a receiver supports the “key aspects of the device [, which] are the ability to individually address a large number of receivers and the ability to operate with very low power drain.” Exh. 1006, p. 17, lines 9-12; Exh. 2001., ¶¶44-45.

C. Palmer (Exh. 1007)

U.S. Patent, No. 7,337,326 (“*Palmer*”) was filed on March 27, 2003. *Palmer* discloses an approach for validating a user’s identity using biometric data. The device may be an electronic credit card. Exh. 1007, 1:18-39, 4:12-63, 11:45-12:28, Fig. 4. The device includes a biometric sensor “designed to sense some physical attribute of a person” such as a fingerprint, a voice print, or a retinal print. Exh. 1007, 2:62-3:8; Exh. 2001, ¶¶46-47.

D. Rolf (Exh. 1007)

U.S. Patent, No. 7,376,583 (“*Rolf*”) was filed on August 10, 2000. *Rolf* discloses a system for performing financial transactions, such as sales transactions at a point of sale terminal, via a wireless communications link. Exh. 1008, 1:16-26. The system includes a “wireless communication device,” which “communicates with [a] point of sale terminal either directly ... or through a central processing facility ... for processing of a financial sales transaction.” Exh. 1008, 3:13-25. The system provides communication links, allowing transactions to occur using a handheld electronic device, such as cellular telephones or pagers. Exh. 1008, 1:16-26; Exh. 2001, ¶48.

IX. RESPONSE TO SPECIFIC IPR GROUNDS

In addition to the reasons outlined in Petitioner’s Procedural Errors section, Section III *supra*, Google’s Petition should be denied for failing to show a reasonable likelihood that the challenged claims are unpatentable. The combination of *Ong* and *Hoff* as presented by Petitioner, fails to identify at least one, if not more, of the claim element of the ’333 patent, such as the switching element, activation cue, activation cue received by a transceiver, and attempts to call a code a command.

E. GROUND 1: Obviousness Based on *Ong* and *Hoff*

Claims 1-4, 6-9, and 11-13 are not obvious based on *Ong* (Exh. 1005) in view of *Hoff* (Exh. 1006), but also *Shogase* and *Fare*. *Ong* and *Hoff*, when combined, fail

to disclose all limitations of claims 1-4, 6-9, and 11-13. *See* Exh. 2001, ¶¶65-170. Furthermore, a POSITA would not have been motivated to use *Ong*'s Electronic Credit Card-ECC wireless communication, in combination with *Hoff*'s Credit Card with Communication Capability using Point-to-Point communication. Exh. 2001, ¶¶54-64.

3. No Motivation to Combine

Ong's approach requires a communication means described as an “infra red communication device, magnetic communication device, or radio frequency communication device.” Exh. 1005, 3:44-46. *Ong*'s wireless communication is depicted as two-way communication in Figure 2 (*See* Exh. 1005, Figure 2). *Ong* describes one wireless communication path established between the electronic credit card and ATM using a communication means. The communication means is described as an “infra red communication device, magnetic communication device, *or* radio frequency communication device under the control of firmware” (Exh. 1005, 3:44-46, emphasis added), thus the word “or” teaches that only one of the devices is used at a time. *See* Exh. 1005, Figure 3, 3:44-47. Further supporting this assertion, *Ong* Figures 2 and 3 only show single bidirectional communications between the ECC and ATMs/transceiver (modem) device connected to a personal computer. *See* Exh. 1005, Figures 2, 3; Exh. 2001, ¶55.

Figure 2: A drawing of ECC communications link to PC and Mainframe Computer. Drawing is not to scale.

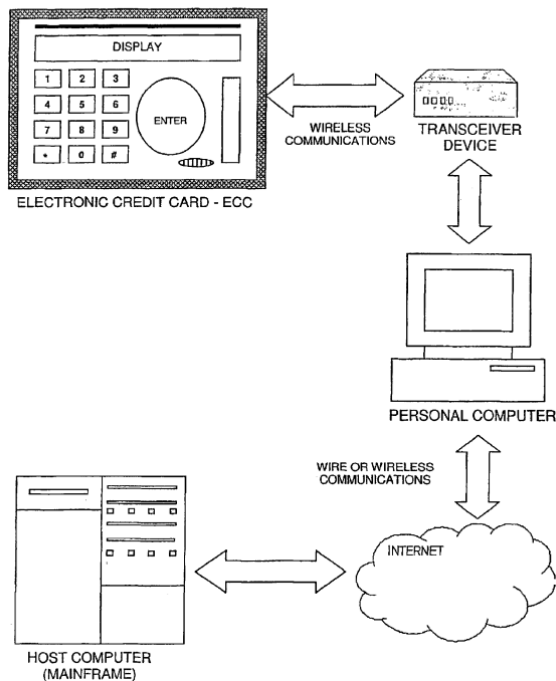
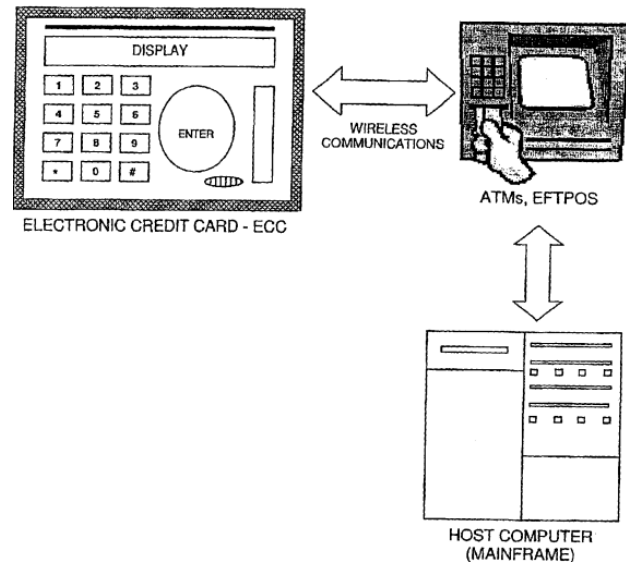


Figure 3: A drawing of ECC communications link to Teller Machines, ATMs, EFTPOS and Host Computer. Drawing is not to scale.



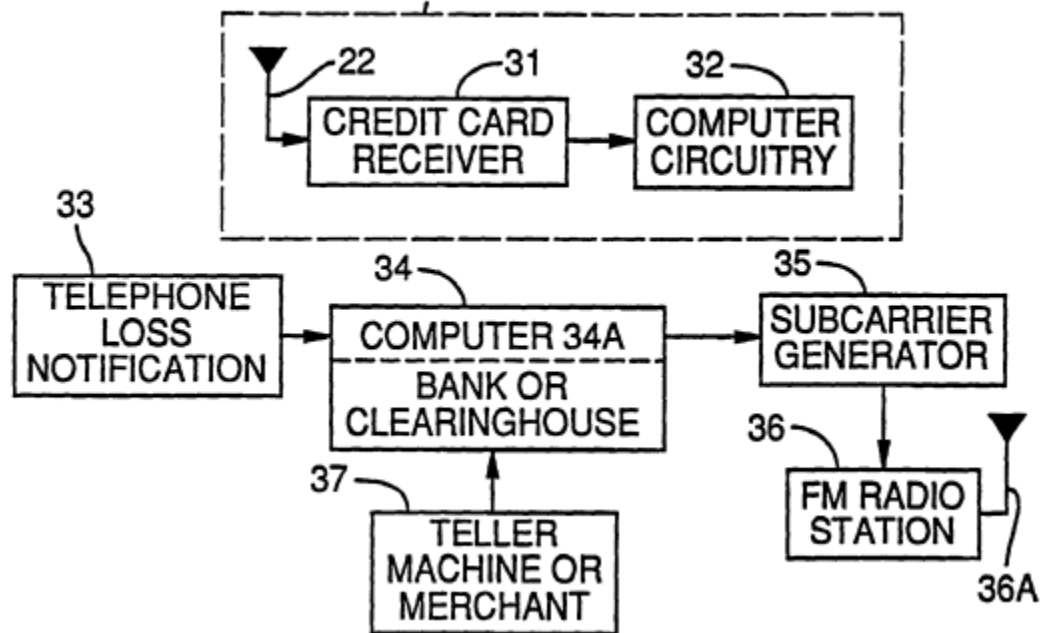
Figures 4-9 are listed as alternate embodiments of the ECC with each embodiment having a pin controlled infra-red, radio frequency, magnetic induction, wire contact, or magnetic strip telecommunication device. Further, Figures 10-12, do have a combination of infra-red, radio frequency, and magnetic induction along with some type of PIN entry, finger print Scanner, or eyeball retina scanner. No description of the operation of the devices of using more than one type of communication is provided. With respect to Figure 12, the specification states that “[t]he infra red communication device, magnetic communication device, or radio frequency

communication device forms the communication means. Exh. 1005, 3:45-48. From Ong, a POSTIA would understand only one device would be active as a communication means if multiple devices were present. Exh. 2001, ¶55.

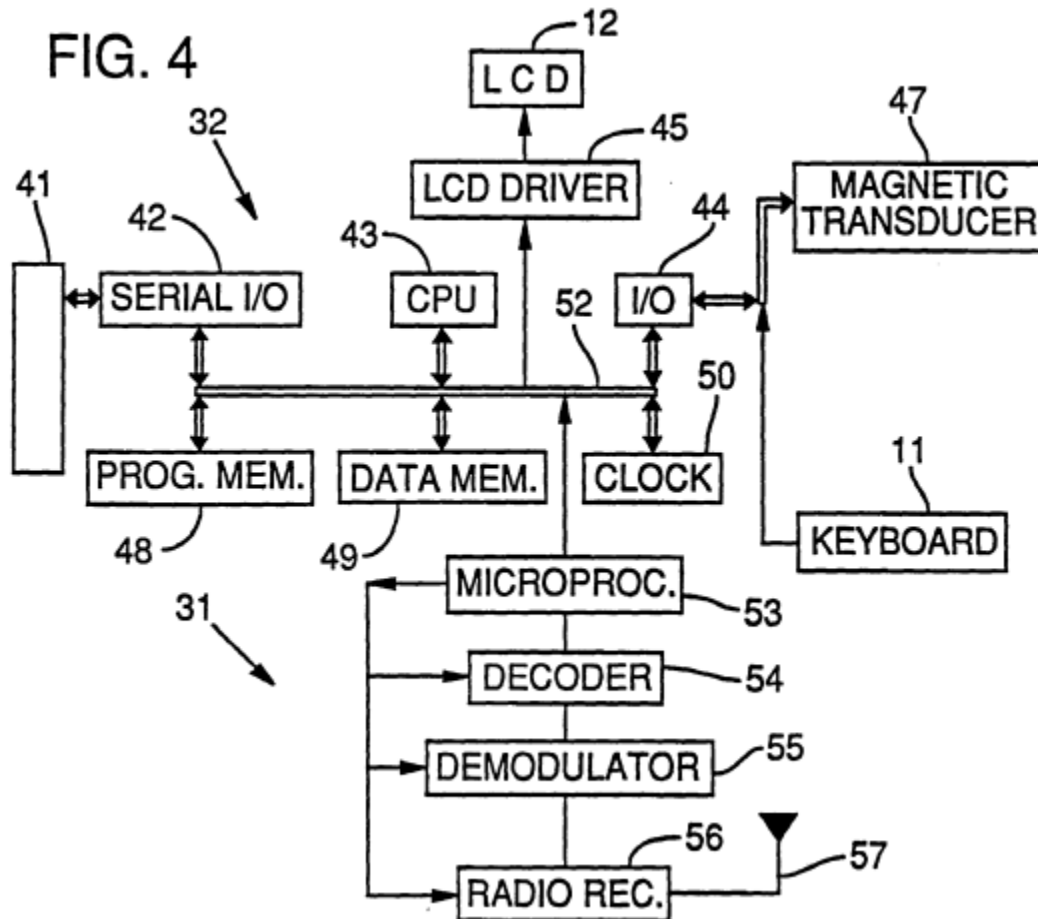
Hoff describes using point-to-point radio communication. See Exh. 1006, p. 7, lines 21-25. “The point-to-point communication circuitry can be time slot protocol paging circuitry such as that in certain time slot protocol radio pagers.” Exh. 1006, p. 8, lines 5-7. “The radio receiver 1 and the antenna 1a are built to receive messages or signals transmitted from commercial radio stations as an FM subcarrier in accordance with the time slot protocol. Exh. 1006, p. 10, lines 2-5. *Hoff* states that it can operate as a point-to-point pager. See Exh. 1006, pp. 15-16, lines 24-2. Further, using only a receiver supports a “key aspects of the device are the ability to individually address a large number of receivers and the ability to operate with very low power drain.” Exh. 1006, p.17, lines 9-12; Exh. 2001, ¶56.

The *Hoff* reference is incapable of transmitting any signals, as it only has receivers and not transmitters or transceivers. Exh. 2001, ¶57. See Figures 3 and 4 of *Hoff*.

- CREDIT CARD 10



-12



Element 1 and 31 are point-to-point radio receivers. Exh. 1006, p. 10, lines 9-11; p. 14, lines 1-20. “[P]oint-to-point radio receiver 31 is further described as including a radio receiver 56, a subcarrier data demodulator 55 which digitizes the signal from the receiver and then extracts the required information, a decoder 54 which decodes the protocol, and a microprocessor 53. Exh. 1006, p. 17, lines 13-18; Exh. 2001, ¶57.

Element 31 in *Hoff* is also described as “... [a] point-to-point communication device 31 designed to receive and transmit to the circuitry 32.” Exh. 1006, p. 17 lines 2-4 (*emphasis added*). Receiving and transmitting “to the circuitry 32” is not receiving and transmitting as a transceiver would with a communications network. Element 31 only receives RF signals. A POSITA would understand that the RF signal received is further processed to access the data contained in the RF signal, and the resulting data is outputted to the circuitry and microprocessor within *Hoff*. Hence, the “transmitting to the circuitry 32” does not disclose or suggest a transmitter that transmits the RF signal, instead, it is the output from the receiver after demodulation and decoding, which is controlled by a microprocessor 53. *See* Exh. 1006, p. 17, lines 13-18; Exh. 2001, ¶58.

A separate radio transmitter is mentioned in an alternate embodiment that is turned on when a card is stolen to aid in tracking the thief. *See* Exh. 1006, p. 15, lines 10-16. However, that transmitter is activated by a signal received by the point-

to-point communication receiver and is only used to locate a stolen card. *See* Exh. 1006, p. 15, lines 14-16; Exh. 2001, ¶59.

A POSITA would have had no reason or motivation to combine the disclosure of *Ong* with the limiting receive-only approach of *Hoff*. Exh. 2001, ¶60. The statement of Lipoff asserting that “substituting or supplementing the components in *Ong*, for the advantages *Hoff* advertises: to provide an improved card utilizing point-to-point radio communication,” (Pet. 13), makes no sense. Such a combination negates the key aspect of *Hoff*’s ability to operate with a very low power drain, as such a combination proposed by Lipoff would have transceivers and receivers operating at an increased power drain, directly contradicts *Ong*. Exh. 2001, ¶61.

Additionally, because a limited space form factor is taught in both references, the more components and antennae placed within that space increase the complexity and cost of a design, further eliminating any motivation to combine. Exh. 2001, ¶62. Such a combination as proposed would require an independent point-to-point receiver for receipt of activation and deactivation of the card and would fail to meet the element [1.d] requirement of a transceiver because *Hoff*, teaches that the point-to-point radio communication only involves a receiver. Exh. 2001, ¶63.

A POSITA would have no motivation to combine the single transceiver two-way data communication approach of *Ong* with the receiver-only approach of *Hoff*. Even if such a combination was possible, the point-to-point receive-only approach

of *Hoff* fails to teach or use “a data transceiver,” as required by the claims in the ’333 patent. Exh. 2001, ¶64. If claim elements are missing from the combined references, then there is no chance of successfully combining the references to teach or describe all of the elements of the claims.

Ground 1 is asserted by Petitioner to be based on only two references *Ong* and *Hoff*, but Petitioner also relies on *Shogase*, a third reference. See Pet, 24; Exh. 2001, ¶77. This reference is not asserted in Ground I, and Petitioner provides no motivation to combine this reference with *Ong* and *Hoff*. It is the Petitioner who bears the burden to establish a motivation to combine, and the Petitioner has failed to meet that burden. Therefore, consideration of *Shogase* in Ground 1 is improper. *Koninklijke Philips N.V. v. Google LLC*, 2019-1177, 10 (Fed. Cir. Jan. 30, 2020).

Similarly, the Petition improperly cites a fourth reference, *Fare*, in Ground I. Pet. ¶58. Exh. 2001, ¶142. The Petitioner failed to meet its burden to establish a motivation to combine *Fare* with *Ong* and *Hoff*. There is no motivation to combine *Fare* with *Ong* and *Hoff* in the Petition. Therefore, consideration of *Fare* in this Ground 1 is improper. *Koninklijke Philips N.V. v. Google LLC*, 2019-1177, 10 (Fed. Cir. Jan. 30, 2020).

4. Independent Claim 1

The combination of *Ong* in view of *Hoff* does not render claim 1 obvious because all the claim elements are not found in the combined references. Exh. 2001,

¶65.

- a. **[1.b] “a control device operatively linked to said electronic circuit, with an invariable activation command being issued when said control device is selectively triggered”**

The '333 Patent describes the “invariable activation command” as “the activation command issued when control device ... is triggered.” Exh. 1001, 7:15-17. Further, “[t]he same invariable activation command will thus be issued upon triggering the control device 12, and it is the state of switching element 44b, resulting from the receipt or non-receipt of an activation cue by portable electronic device 10, that will be decisive as to the type of data conveyance that will occur.” Exh. 1001, 7:24-29. The data conveyance type depends upon the activation cue and not the activation command or invariable activation command. Exh. 2001, ¶66.

The prosecution history states that “the control device claimed in the present patent application, ... must necessarily be triggered to initiate any data flow towards or out of the electronic circuit.” Exh. 1002, 218. The triggering is with the invariable activation command. “Generally, control device 12 is considered to be triggered when the portable electronic device holder has successfully accomplished the necessary steps for control device 12 to issue an activation command, for example when the PIN or fingerprint scan was authenticated, or when the validation button was pressed, or when the button was pressed while the fingerprint scan was authenticated.” Exh. 1001, 5:33-39; Exh. 2001, ¶67.

The Petition mistakenly asserts that “*Ong* discloses the same. Once the user’s identity has been validated by the user verification means, a unique authorization code is generated. *Ong*, 3:51-59. According to the Petition, *Ong*’s “authorization code is an ‘invariable activation command’ because it is automatically and inevitably generated once the user is verified.” Pet, 22; Exh. 2001, ¶68.

A plain definition of “code” in the Merriam-Webster’s web site (www.merriam-webster.com) is 3(b) “a system of symbols (such as letters or numbers) used to represent assigned and often secret meanings.” That definition deals with characters and security, just as the authorization code in *Ong* deals with security. For completeness, other meanings of code include, 3(a) a system of signals or symbols for communication; 3(c) coded language: a word or phrase chosen in place of another word or phrase in order to communicate an attitude or meaning without stating it explicitly. Exh. 2001, ¶69.

The *Ong* patent describes “a communication means for communicating with a transaction station to provide the transaction station with account details of the user and the authorization code to facilitate an electronic fund transfer transaction.” Exh. 1005, 1:58-61. “The means for generating unique authorization code then generates the authorization code which is provided along with the user’s account details, to the communication means which communicates these to a transaction station to facilitate an electronic funds transfer transaction.” Exh. 1005, 1:58-61, 3:54-59.

Ong states that the authorization code is provided to the communication means. However, regardless of whether *Ong*'s communication means has received an authorization code, the communication means can access the data whenever it is needed. Exh. 2001, ¶70.

Communication with the transaction station is not limited by the exclusion of the authorization code. Rather, the authorization code is only needed for *Ong*'s communication means ***to continue with*** an electronic funds transfer transaction. *See* Exh. 1005, 3:60-61. The communication means already had access to the data as the authorization code had been generated, as the code was not secured and was accessible. Exh. 1005, 4:49-55. A code may be part of a larger structure such as a command (i.e., provided along with other data such as the user's account details). For example, an authorization code may be incorporated into a command or transaction message for a transaction that also includes account data. However, *Ong*'s authorization code is only identifier data. Exh. 2001, ¶71. But the Petition only asserts that the "code" in and of itself is an "invariable activation command."

That the authorization code is not the claimed invariable activation command is further supported in the Petition and Mr. Lipoff's declaration because both describe that the code has to be "provided ... to the communication means and prevent it from being communicate[d] ... to a transaction station to facilitate an [EFT] transaction." *See* Pet. 22; Exh. 1003, ¶89. The authentication code, according

to Lipoff, has to be communicated to (or not communicated to) the transaction station. Therefore, pursuant to Lipoff and contrary to the claim language, the authorization code in and of itself does not result in any action or transaction occurring and ***is not an invariable activation command***. Exh. 2001, ¶72.

Petitioner's disablement argument is not relevant to the selection of a data exchange, for example, between a user of the portable electronic device or the data exchange device. *See* Exh. 1001, 7:4-14. As the "invariable activation command will trigger alternate data conveyance operations responsively to the reception or non-reception of an activation cue, so alternate commands within electronic circuit 14 will occur depending on the data conveyance operation type." Exh. 1001, 7:47-54. Rather, Petition asserts that *Ong* teaches the cue is an on/off switch for communication, as communication is prevented. *See* Pet. 22. Separate activation and deactivation messages in *Ong* are not an "activation cue" as described in the '333 patent. Exh. 2001, ¶73.

The Petition incorrectly asserts that "*Ong* does not indicate the user verifications is dependent on the disable means (§VI.A.3.G(1.e))." Pet. 22. However, *Ong* states:

Preferably the electronic credit card includes a disablement means for disabling use of the electronic credit card if a predetermined number of attempts [to] verify the identity of the user fail. Preferably the

disablement means is activated remotely by an issuer of the electronic credit card or other authority.

Exh. 1005, 1:65-2:3.

Also:

The electronic credit card verifies the identity of the user before it is activated. The electronic credit card will be disabled if a predetermined number of attempts to gain access to its operation fail and this will prevent fraud in the event that an electronic credit card is stolen. An authorising distributor or other authorised body could re-initialise the electronic credit card through a controlled management system used to issue the electronic credit card.

Id. 4:51-58. Therefore, contrary to Petitioner, *Ong* **does** indicate that user verification is dependent upon the verification of a user and hence the disable means.

Exh. 2001, ¶74.

A POSITA would understand that, if the ECC of *Ong* is disabled, for example, due to failed verification attempts, then the card is deactivated, and the following '333 patent claim step cannot occur:

a control device operatively linked to said electronic circuit, with an invariable activation command being issued when said control device is selectively triggered;

Exh. 1001, 9:65-10:2. In *Ong* the ECC is disabled before the invariable activation command is generated. Further, the re-initialization of the ECC in *Ong* is not by the

user or user's actions, but by the card issuer or other authority. *See* Exh. 1005, 4:51-58; Exh. 2001, ¶75.

Petitioner only uses the *Hoff* reference to assert a control device being operatively linked to the electronic circuit, but not for data conveyance. Exh. 2001, ¶76. For these reasons, the “code,” as described in the *Ong* reference, is not an invariable activation command as required by the Challenged Claims of the '333 Patent. *Id.*, ¶78. Also, the disablement described in *Ong* is not the claimed selection between two types of data exchange or data conveyance operation type as required by element [1.b]. *See* Pet. 22; Exh. 2001, ¶79.

b. [1.d.ii] “said data transceiver being ... for receiving a selectively emitted activation cue from a source external to said portable electronic device”

The Petition states that “[i]t would have been obvious to a POSITA to similarly allow the card to be reenabled by remotely deactivating the disablement means.” Petition 31 (citing Lipoff ¶107). Yet, this statement contradicts earlier positions taken in the Petition and by Mr. Lipoff. *See* Pet. 22; Exh. 2003 ¶89; Exh. 2001, ¶80.

The Petition describes *Ong*'s “disablement” as stopping the “code” that is a unique identifier for the authenticated user from being transmitted. If the unique identifier is not transmitted, no external device or devices know the user of the portable electronic device has been authenticated. *See* Lipoff ¶107. But *Ong*'s

disablement is of the ECC itself; it is not a disablement of generating a code that the transceiver has access to and deciding not to transmit it. Exh. 2001, ¶81.

A POSITA would know that because “disablement” stops transfer of the “code,” without the “code,” there would be no way to ensure the user is a validated user. Otherwise, a stolen card may be improperly reenabled remotely without *Ong*’s code ever being required. Exh. 2001, ¶82.

The Petition is further contradictory when it states:

One reason offered for disabling the card is “if a predetermined number of attempts to verify the identity of the user fail.” *Ong*, 1:65-2:3. A POSITA would have recognized that permanently disabling a card based on failed user verification would be undesirable. Lipoff ¶107. *Ong* confirms that “[a]n authorizing Distributor or other authorized body could re-initialize the electronic credit card” once disabled. *Ong*, 4:46-58.

Petition 31; Exh. 2001, ¶83.

Also, according to the Petition:

Once the user’s identity has been validated by the user verification means, a unique authorization code is generated. *Ong*, 3:51-59. This authorization code is an “invariable activation command” because it is automatically and inevitably generated once the user is verified.

Id., 22. According to the Petition’s interpretation of *Ong*, the only time an “invariable activation command” is generated is upon user verification. Therefore,

if a reactivation occurs because of failed verification attempts, the previous claim element [1.b.] could not have been met, as no successful verification has occurred. Exh. 2001, ¶84.

Additionally, the Petitioner's combination of *Ong* and *Hoff* as using the point-to-point radio communication of *Hoff*, fails to use a transceiver as required in the claim element [1.d]. See Exh. 2001, ¶¶56-59; ¶85.

Hoff is cited in the Petition as using point-to-point radio communication to indicate whether a card is valid:

Hoff describes “an improved credit card which utilizes point to point radio communication to provide an indication of whether a card is valid” *Hoff* 5:15-17; Lipoff ¶109. Like *Ong*, *Hoff* describes a mechanism “to update or deactivate a credit card from a remote location by sending signals over the communication channel” such that the “card can be deactivated or updated even while the card is in the user's pocket or wallet.” *Hoff* 6:7-12; *id.*, 15:1-18 (“The point-to-point communication device 31 is designed to receive and transmit to the circuitry 32, a sequence of numbers. This sequence of numbers either resets the card's ‘open to buy’ limit or it deactivates the card.”).

Pet. 32. The use of point-to-point radio communication (receive only) occurs regardless of validation, and it even occurs when in a user's pocket, regardless of whether an invariable activation command has occurred. Exh. 2001, ¶86.

Therefore, *Ong* cannot operate as asserted in the Petition, and *Hoff's*

description of a point-to-point operation is limited to a receiver-only approach and fails to disclose the transceiver as required by the claim element and the combined references of using *Hoff's* point-to-point approach in *Ong* fail to teach this claim limitation [1.d]. Exh. 2001, ¶87.

- c. **[1e] “a data conveyance switching element operatively linked to said electronic circuit, said switching element being in an activated state upon an activation cue having been received by said data transceiver, and being in an inactive state when no activation cue was received by said data transceiver”**

The disablement described by Petitioner and Mr. Lipoff for element [1.d.ii] is contradictory to the claim language (*see* Exh. 1002, ¶¶81-87) and the same logic applies to this element as well. Exh. 2001, ¶88.

Petitioner's expert describes the use of the “signal” in the figure on page 35 of the Petition as a Point-to-Point transmission: “[t]o facilitate activation or deactivation, an ‘output 1b of point to point radio receiver 1 is connected to logical circuitry 2.’” Exh. 1003, ¶¶55-56; Exh. 2001, ¶89.

However, the figure on page 35 of the Petition does not appear in *Ong* or *Hoff*. Exh. 2001, ¶90. Contrary to the figure on page 35 of the Petition, the point-to-point signaling taught in *Hoff* describes a one-way communication path with the card device that only has a receiver to receive the FM broadcast signals. *See* Exh. 2001 ¶¶56-57, 91.

The claims require that the activation cue is “received by said data transceiver” in claim element [1.e] (Exh. 1001, 10:9-14), and point-to-point communication, as described in *Hoff*, is received by an **FM receiver** (not a transceiver) able to receive broadcast FM signal and hence incorporated into the combination of *Ong* and *Hoff*. Exh. 2001, ¶92.

The activated state and inactivated states described in the ’333 Patent refer to the switching device. “According to the invention, at any given time, switching element 44b will consequently be in either one of the two following states: a) an activated state wherein an activation cue was received by the transceiver 18; or b) an inactive state wherein no activation cue was received by the transceiver.” Exh. 1001, 6:18-25; Exh. 2001, ¶93.

The ’333 Patent’s switching is for the data flow or data exchange. See Exh. 1001, 6:52-67. Exh. 2001, ¶94. By contrast, the *Ong* patent describes a “disablement means” that only appears twice in one paragraph in the summary of the invention. See Exh. 1005, 1:65-2:3. In that one paragraph, *Ong* states that disablement means is for “disabling use of the electronic credit card.” A POSITA would understand that disabling the electronic credit card of *Ong* refers to the functioning of the credit card and not switching between data or data flows within the credit card as claimed in the ’333 patent. Exh. 2001, ¶95.

Ong describes the disablement of the electronic credit card. Once disabled, the electronic credit card is not working and does not have the ability to take any actions or to conduct a transaction. Exh. 2001, ¶96.

Ong does not describe the enablement of a card. The only way to recover a disabled card is by “[a]n authorizing distributor or other authorized body could re-initialize the electronic credit card through a controlled management system used to issue the electronic credit card.” Exh. 1005, 55-58. A card must be operating to be re-enabled. Re-enablement is not discussed in *Ong* because the card in *Ong* is explicitly disabled to the extent that an issuer has to re-initialize the card to get it working again. This is part of the security in *Ong*. Exh. 2001, ¶97.

A POSITA would understand that the management system in *Ong* that issued the card, once disabled, would have to re-initialize the card, and re-initializing is akin to reissuing the card. As it is the issuer of the card that need to re-initialize disabled cards using the system that issued the card. Exh. 2001, ¶98.

The Petition asserts that a “POSITA would have recognized that *Ong*’s disablement means is in one of two states: a first state in which the disablement means has not been triggered (activated state) or a second state in which the disablement means has been triggered (inactive state). Lipoff ¶112.” Pet. 34. However, what *Ong* describes is not the state of the claimed switching element because once disabled, the card cannot be reenabled; rather, it must be re-initialized.

Exh. 2001, ¶99. Hence, *Ong*'s disablement means is for disablement of the electronic credit card and not the switching as claimed in the '333 Patent. Exh. 2001, ¶100. Therefore, the combination of *Ong* and *Hoff* fail to describe this element. Exh. 2001, ¶101.

- d. [1.g.i] “wherein upon said control device being selectively triggered to issue [sic] invariable activation command: if said switching element is in said activated state, a data exchange will be initiated through the instrumentality of said data transceiver for exchanging data between said electronic circuit and an external data exchange device.”

Contrary to the Petition's assertion, *Ong*'s generation of an authorization code is not the same as the claimed “invariable activation command.” See Exh. 2001, ¶¶67-70, ¶102.

Hoff's point-to-point radio receiver is not a transceiver as asserted in the Petition. See Pet. 42. A transceiver receives and transmits but a *Hoff*'s receiver only receives. Exh. 2001, ¶103.

Hoff only describes a FM receiver. See Exh. 2001, ¶¶56-57, ¶104. Indeed, it would not have been practical at the time of invention to put an FM transmitter and antenna in a card that could respond to a commercial FM broadcast. It would be similar to putting a single-station HAM radio into a card. The component size and power requirements for an FM transmitter or transceiver to respond with a signal

similar to the commercial FM received signal is too great, and a POSITA would understand that it would not be possible. Exh. 2001, ¶105.

This claim element requires “the control device being selectively triggered to issue an invariable activation command.” Exh. 1001, 10:17,18; Exh. 2001, ¶106. Because *Ong*’s authorization code does not satisfy the claims requirement for an invariable activation command, and *Hoff* fails to provide the claimed transceiver, the combination of *Ong* and *Hoff* does not describe this claim element. Exh. 2001, ¶107.

- e. **[1.g.ii] “wherein upon said control device being selectively triggered to issue [sic] invariable activation command: if said switching element is in said inactive state, data will be conveyed from said electronic circuit to said user interface device for communicating information to the portable electronic device holder”**

Because *Ong*’s authorization code is not an “invariable activation command” and the FM receiver in the point-to-point communication of *Hoff* is not a transceiver, this limitation also is not satisfied. See Exh. 2001, ¶¶56-57; 67-75; Exh. 2001, ¶108.

The Petition asserts that:

When combined with *Ong*’s user verification means, it would have been obvious to a POSITA to display “VOID” or an “appropriate note” on the display in response to a user verification (selective triggering) to convey an appropriate message to the user, allowing a user to understand that status of their transaction. Lipoff, ¶133; §VI.A.2. No financial transaction would be completed when *Ong*’s user verification means generates the “authorization code” and the card is in the inactive state, and it would have been obvious to display this data to the user on

the UI to convey that information upon entry of the PIN. Lipoff, ¶133. At very least, when combined with Hoff, it would have been obvious for *Ong*'s display to present the "VOID" indicator or other "appropriate note" disclosed in Hoff as an indication no transaction was completed upon *Ong*'s PIN entry (selective triggering). *Id.*

Pet. 45. This paragraph is contradictory to:

A POSITA would have recognized that *Ong*'s disablement means is in one of two states: a first state in which the disablement means has not been triggered (activated state) or a second state in which the disablement means has been triggered (inactive state). Lipoff, ¶112.

Pet. 34, where the second state in which the disablement means has been triggered (inactive state). If *Ong* is described by Lipoff as disabling the ECC as to put in the inactive state, then no action is taken by the ECC, and no authorization code can be generated by the user verification means. Exh. 2001, ¶109.

First, ignoring the fact the ECC is disabled, the message displayed is in response to the "a user verification." But, the "code" is only generated if the user is verified. *See* Exh. 1005 3:51-59. A transaction does not occur in response to the verification means in *Ong*. The assertion that a message would be displayed to indicate that no transaction was completed means the user was not verified when a transaction was started. If a transaction was started, then data was conveyed not to the portable electronic device holder but to the external data exchange device. So, no transaction completed message indicates that a transaction was started, but it can

only start if the “code” has been generated since a code, according to the petition, is always generated. Exh. 2001, ¶110.

Second, if the display of the data to the user on the UI conveys that information upon entry of the PIN, then the display of data occurs *before* the code (the purported invariable activation command) is created according to the Petition. Exh. 2001, ¶111.

Third, if the PIN is invalid, the code (the purported invariable activation command) is not created. Exh. 2001, ¶112. The displaying of the data on the UI upon entry of the PIN, therefore, fails to meet the requirement of this element. Exh. 2001, ¶113.

Element [1.g.i] requires a switching element. Petitioner has only identified the displaying of data. Therefore, the claimed switching element has not been identified. Also, the Petition describes switching occurring in only one direction but ignores the claim limitation requiring switching to occur in the other direction. Exh. 2001, ¶114.

No switching element, as claimed in the ’333 Patent, is disclosed for this claim element. Exh. 2001, ¶115. The combined references of *Ong* and *Hoff* fail to teach all the elements of claim 1 because the switching element is not taught. Exh. 2001, ¶116.

5. Claim 2 – “A portable electronic device as defined in claim 1, wherein said user interface device is a display screen”

Claim 2 is a dependent claim and incorporates all the elements of claim 1. Exh. 2001, ¶117. All the elements of claim 1 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶118.

The combination of *Ong* and *Hoff* fails to describe claim 2 because of its dependence upon claim 1 and the elements of claim 1 and not described by the combination of *Ong* and *Hoff*. Exh. 2001, ¶119.

6. Claim 3 – “A portable electronic device as defined in claim 1, wherein said user interface device is a display screen.”

Claim 3 is a dependent claim and incorporates all the elements of claim 1; Exh. 2001, ¶120. However, all the elements of claim 1 are not taught by the combination of the *Ong* and *Hoff* references. Exh. 2001, ¶121. Thus, in failing to teach all the claim elements of claim 1, the combination of *Ong* and *Hoff* also fails to teach all the claim elements of dependent claim 3. Exh. 2001, ¶122.

7. Claim 4 – “A portable electronic device as defined in claim 1, wherein said control device is a biometric parameter detector.”

Claim 4 is a dependent claim and incorporates all the elements of claim 1. Exh. 2001, ¶123. However, all the elements of claim 1 are not taught in the combination of the *Ong* and *Hoff* references. Exh. 2001, ¶124. Thus, in failing to

teach all the claim elements of claim 1, the combination of Ong and Hoff also fails to teach all the claim elements of dependent claim 4. Exh. 2001, ¶125.

8. Claim 6 – “A portable electronic device as defined in claim 1, wherein said control device is a manually activated button, and whereby said control device is triggered when the button is pressed.”

Claim 6 is a dependent claim and incorporates all the elements of claim 1. Exh. 2001, ¶126. However, all the elements of claim 1 are not taught in the combination of the *Ong* and *Hoff* references. Exh. 2001, ¶127. Thus, in failing to teach all the claim elements of claim 1, the combination of *Ong* and *Hoff* also fails to teach all the claim elements of dependent claim 6. Exh. 2001, ¶128.

9. Claim 7 – “A portable electronic device as defined in claim 1, wherein said electronic circuit comprises said switching element.”

Claim 7 is a dependent claim and incorporates all the elements of claim 1. Exh. 2001, ¶129. However, all the elements of claim 1 are not disclosed in the combination of the *Ong* and *Hoff* references. Exh. 2001, ¶130. Claim 7 requires the electronic circuit include a switching element. A POSITA would understand a switching element in an electronic circuit to be a physical switching element in the electronic circuit. Exh. 2001, ¶131. However, the *Ong* reference does not teach or describe a physical switching element. Exh. 2001, ¶132.

And while the Petition cites *Hoff*, 5:25-6:5 for *Hoff*'s circuitry (*See* Pet. 52), and the Patent Owner admits that the *Hoff* reference discloses circuitry, the claim

element requires a switching element in the electronic circuit, which is not taught. The switching element is not simply a switch located anywhere within a circuit. Rather, the switching element has a specific function as defined in the claim element [1.e], and that is not found in the teachings of the *Hoff* reference. Exh. 2001, ¶133.

Also, a POSITA would understand that *Ong* does not provide any method for remote activation, as the only way to reactivate the card is for the issuer to re-initialize the card. Exh. 1005, 4:55-58. Exh. 2001, ¶134. Thus, the combination of the *Ong* and *Hoff* references fails to teach claim 7 because of its dependence upon claim 1, and all of the elements of claim 1 are not described in *Ong* and *Hoff*. Also, a physical switch element is not identified in the circuitry of *Ong* and *Hoff*. Exh. 2001, ¶135.

10. Claim 8 – “A portable electronic device as defined in claim 7, wherein said electronic circuit comprises a microchip, and wherein said switching element is a series of instructions programmed onto said microchip.”

Claim 8 is a dependent claim and incorporates all the elements of claims 1 and 7. Exh. 2001, ¶136. All the elements of claims 1 and 7 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶137. Thus, the combination of *Ong* and *Hoff* fails to describe claim 8 because of its dependence upon claims 1 and 7, and the elements of claims 1 and 7 are not described in *Ong* and *Hoff*. Exh. 2001, ¶138.

11. Claim 9 – “A portable electronic device as defined in claim 1, wherein said switching element comprises a logical circuit.”

Claim 9 is a dependent claim and incorporates all the elements of claim 1. Exh. 2001, ¶139. All the elements of claim 1 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶140.

The combination of *Ong* and *Hoff* fails to describe claim 9 because of its dependence upon claim 1, and the elements of claim 1 are not described in *Ong* and *Hoff*. Exh. 2001, ¶141.

12. Independent claim 11

a. [11.pre.v]: “communication ports operatively link to said circuit”

The Petition improperly cites a reference, *Fare*, which is not included in the Ground. Pet. ¶58; Exh. 2001, ¶142. Petitioner provided no motivation to combine *Fare* with *Ong* and *Hoff*. Exh. 2001, ¶142. Therefore, *Fare* is not properly presented in this Ground 1.

A POSITA would understand the communication ports in the '333 patent would be for two-way communication as the claims require a data transceiver, which is a two-way communication device. See Exh. 1001, 10:3; Exh. 2001, ¶143. Thus, the point-to-point communication of *Hoff* is only one way, with the FM signal only capable of being received. Exh. 2001, ¶144. Therefore, this limitation is not met.

- a. **[11.pre.vi]:”a switching element operatively linked to said electronic circuit and being in a default inactive state”**

As described in the '333 Patent and required by the claims, a switching element is not described in either the *Ong* or *Hoff* reference. Exh. 2001, ¶145; *see also* Sec IX.A.2.c., *supra*. A POSITA would understand that *Ong* does not provide any method for activation through the transaction station, as the only way to reactivate the card is for the issuer or authorized distributor to re-initialize the card. Exh. 1005, 4:55-58. The user is not able to re-initialize the card. A merchant is not able to re-initialize the card. *Ong* explicitly states the “electronic credit card can be disabled at a transaction station through a system control function by the issuing company or organization. Exh. 1005, 4:59-61.

Re-initialization must occur, not through a system control function at a transaction station, but a separate controlled management system used to issue the electronic credit card. Exh. 1005, 4:59-61 Therefore, user action or validation of a user occurs with re-activation, no authorization code is generated or used. Exh. 2001, ¶146.

The approach of *Hoff* for the re-activation of a card does not use a “data transceiver” to receive the “activation cue,” it uses a point-to-point receiver. “[A]n activation cue having been received by said data transceiver” is required by the claims of the '333 patent (for example, element 1.d). Exh. 1001, 10:11-12; Exh.

2001, ¶147. The combination of *Ong* with *Hoff* fails to describe a switching element. Exh. 2001, ¶148. Thus, the switching element is not found in the combined reference of *Ong* and *Hoff*. Exh. 2001, ¶149.

b. [11.a]: “awaiting for an activation cue to be received at a predetermined one of said communication ports”

The portable electronic device is required to be waiting for an activation cue. Exh. 1001, 12:3-4. Exh. 2001, ¶150. A POSITA would understand that a “cue” would not change due to the state of the card. Multiple messages (disable/enable) sent depending upon the state of the card are not a cue. Rather, cue is a broadcast signal that is always ‘on’ (or in transmitter mode) and that can be listened to by a device configured to listen to such messages. Exh. 2001, ¶151. Activation and deactivation messages are not a “cue” as different messages are used and not a single “cue.” Exh. 2001, ¶152; *see* Sec. IX.A.2.b. & c., *supra*. Thus, the activation cue is not described or taught in *Ong* and *Hoff*. Exh. 2001, ¶153.

c. [11.b]: “if an activation cue is received at one of said communication ports, changing the state of said switching element from its default inactive state to and activated state”

The combination of *Ong* and *Hoff* fails to teach an activation cue. Exh. 2001, ¶154. The claim element requires the state of the switching element to change. Exh. 1001, 5-7; Exh. 2001, ¶155.

The Petition describes a state of the card changing, but it fails to identify the claimed switching element. Exh. 2001, ¶156. The Petition improperly equates a card issuer re-initializing a card in *Ong* as reactivation. Pet. 64. Re-initializing a card is not reactivation. Exh. 2001, ¶157; *see also* Sec. IX.A.2.c & d., *supra*. The Petition asserts that the signal received periodically in *Hoff* is an activation signal, and receiving the signal keeps the card described in *Hoff* active. *See* Pet. 64. This is contrary to what the ‘333 claim element requires: “if an activation cue is received at one of said communication ports, changing the state of the said switching element” Exh. 1001, 12:5-7. In *Hoff*, by contrast, if the signal is NOT received, the card is deactivated. As long as the signal is periodically received, the card is not deactivated. Exh. 2001, ¶158.

The claim element [11.b] is not described in the combination of *Ong* and *Hoff*, and no switching element is identified in *Ong* and *Hoff*. Exh. 2001, ¶159.

- d. [11.d]: “if said switching element is in its activated state, initiating a data exchange with an external data exchange device through at least one of said communication ports”**

The combination of *Ong* and *Hoff* fails to teach the switching element. Exh. 2001, ¶160. The claim element [11.d] is not described in the combination of *Ong* and *Hoff*, as no switching element is identified in *Ong* and *Hoff*. Exh. 2001, ¶161; *See* Sec. IX.A.2.d, *supra*.

- e. **[11.e]: “if said switching element is in its inactive state, conveying data from said electronic circuit to said user interface device for communicating information to the portable electronic device holder”**

The combination of *Ong* and *Hoff* fails to teach the switching element. Exh. 2001, ¶162. The claim element [11.e] is not described in the combination of *Ong* and *Hoff*, as no switching element is identified in *Ong* and *Hoff*. Exh. 2001, ¶163; *See* Sec. IX.A.2.e, *supra*.

- 13. Claim 12 – “A method as defined in claim 11, wherein said activation cue is received at one of said communication ports distinct from another one of said communication ports used for data exchange with the external data exchange device”**

Claim 12 is a dependent claim and incorporates all the elements of claim 11. Exh. 2001, ¶164. Petitioner asserts that “*Hoff* explicitly states its radio *transceiver* and antenna (communication port) is used to update the open-to-by status of the card. *Id.*, 6:7-12, 15:1-18.” Pet. 67 (emphasis added). However, the term transceiver does not appear in the *Hoff* reference. The point-to-point communication device 31 only has a radio receiver 56. Exh. 1006, 17:12-18. The point-to-point communication device 31 can receive and transmit to the circuitry 32 (*Id.* 17:3-4), but that is not to a wireless transmitter or antenna, and no transceiver or transmitter is connected to the antenna of *Hoff*. Exh. 2001, ¶165; *see* Sec. IX.A.2.b., *supra*.

All the elements of claim 11 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶166. The combination of *Ong* and *Hoff* fails to describe

claim 12 because of its dependence upon claim 11, and the point-to-point receive only communication cannot be used for data exchange with the external data exchange device. Exh. 2001, ¶167.

14. Claim 13 – “A method as defined in claim 11, wherein the additional following step occurs after selectively triggering said control device if said switching element is in said activated state: conveying data from said electronic circuit to said user interface device for communicating information to the portable electronic device holder”

Claim 13 is a dependent claim and incorporates all the elements of claim 11. Exh. 2001, ¶168.

All the elements of claim 1 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶169.

The combination of *Ong* and *Hoff* fails to teach all the claim elements of claim 13 because *Ong* and *Hoff* also fail to teach all the claim elements in claim 11. Exh. 2001, ¶170.

F. GROUND 2: Obviousness Based on *Ong*, *Hoff*, and *Palmer*

1. No Motivation to Combine

There is no motivation to combine *Ong* and *Hoff*. *See supra* IX.A.1; Exh. 2001, ¶171. The *Palmer* reference is only used for its discussion about biometrics. Exh. 2001, ¶172. The elements missing in the combination of *Ong* and *Hoff* are not remedied with the addition of *Palmer*. Exh. 2001, ¶173.

There is no motivation to combine the *Ong*, *Hoff*, and *Palmer* references at least because, if such a combination is possible, claim elements would still be missing. Exh. 2001, ¶174.

2. Claim 5 – “A portable electronic device as defined in claim 4, wherein said biometric parameter detector is a fingerprint scanner capable of obtaining a fingerprint scan, and whereby said control device is triggered when the fingerprint scan matches a fingerprint image pre-saved in said electronic circuit”

Claim 5 is a dependent claim and incorporates all the elements of claims 1 and 4. Exh. 2001, ¶175. All the elements of claims 1 and 4 are not disclosed in the combined references of *Ong* and *Hoff*. Exh. 2001, ¶176; *see* Sec. IX.A.2.&5., *supra*. The *Palmer* reference does not address any of the missing elements from claims 1 and 4. Exh. 2001, ¶177.

The combination of *Ong*, *Hoff*, and *Palmer* fails to describe all of the elements of claim 5 because of its dependence upon claims 1 and 4. The elements of claims 1 and 4 are not found in the combination of *Ong*, *Hoff*, and *Palmer*. Exh. 2001, ¶178.

G. GROUND 3: Obviousness Based on *Ong*, *Hoff*, and *Rolf*

1. No Motivation to Combine

There is no motivation to combine *Ong* and *Hoff*. *See supra* XI.A.1; Exh. 2001, ¶179. The *Rolf* reference is only used for its discussion about multiple communication paths. Exh. 2001, ¶180.

The elements missing in the combining of *Ong* and *Hoff* are not discussed in *Rolf*. Exh. 2001, ¶181. There is no motivation to combine the *Ong*, *Hoff*, and *Rolf* references, at least because, if such a combination is possible, claim elements would still be missing. Exh. 2001, ¶182.

2. Independent Claim 10

- a. **[10.g]: “A data conveyance switching element operatively linked to said second electronic circuit, and switching element being in an activated state upon an activation cue having been received by said second data transceiver, and being in an inactive state when no activation cue was received by said second data transceiver**

As previously explained, *Hoff* does not describe or teach a transceiver, and a broadcast FM transmitter could not be incorporated from *Hoff*'s teachings into *Ong*. Exh. 2001, ¶183; *see* Sec. IX.A.3.c, *supra*. As previously explained, *Ong* does not identify a switching element as claimed in the '333 Patent. Exh. 2001, ¶184; *see* Sec. IX.A.3.e, *supra*. The *Rolf* reference was not used for this element. *See* Pet. 80; Exh. 2001, ¶185.

This element of claim 10 of the '333 Patent has not been described in the combination of *Ong*, *Hoff*, and *Rolf*. Exh. 2001, ¶186

- b. [10.i.i]: “wherein upon said control device being selectively triggered to issue said invariable activation command: if said switching element is in its activated state, a data exchange will occur between said first data transceiver and said second data transceiver, thereby exchanging data between said data exchange device and said portable electronic device”

Only *Ong* and *Hoff* are relied on for this element of independent claim 10 of the '333 Patent. Pet. 80. However, neither reference teaches this claim element. Exh. 2001, ¶187.

First, *Ong* and *Hoff* fail to describe a switching element. Exh. 2001, ¶188; *see* Sec. IX.A.3.e, *supra*.

Second, *Ong* only describes establishing one wireless communication path between the electronic credit card and ATM. A communication means is described as “infra red communication device, magnetic communication device, or radio frequency communication device under the control of firmware” (Exh. 1005, 3:44-46) uses an OR, so it is only one of the devices that is used at a time. *See id.*, Figure 3, 3:51-65. *Ong* only describes a single transceiver communicating with a data exchange device. Exh. 2001, ¶189; *see* Sec. IX.A.2., *supra*.

Third, *Hoff* fails to teach or describe a transceiver. Exh. 2001, ¶190; *see* Sec. IX.A.2., *supra*.

The combination of *Ong* and *Hoff* relied on fails to describe using multiple transceivers that are required in element [10.i.i] of the '333 Patent. Exh. 2001, ¶191.

The combination of *Ong* and *Hoff* also fails to describe a switching element used in claim 10 of the '333 Patent. Exh. 2001, ¶192.

- c. [10.i.ii]: “wherein upon said control device being selectively triggered to issue said invariable activation command: ... if said switching element is in its inactive state, data is forwarded to said user interface device for communicating information to the portable electronic device holder”

Only *Ong* and *Hoff* are relied on for this element of independent claim 10 of the '333 Patent. Pet. 81; Exh. 2001, ¶193. *Ong* and *Hoff* fail to describe a switching element. Exh. 2001, ¶194; *see* Sec. IX.A.3.e., *supra*.

The combination of *Ong* and *Hoff* fails to describe a switching element used in claim 10 of the '333 Patent. Exh. 2001, ¶195; *see* Sec. IX.A.2., *supra*.

X. SECONDARY CONSIDERATIONS

As the Petitioner has failed to meet its burden of establishing a *prima facie* case for any of the claims of the '333 patent, much less to identify a motivation to modify *Ong* and *Hoff* (and *Shogase* and *Fare*) in Ground I, *Ong*, *Hoff*, (*Shogase* and *Fare* and *Palmer* in Ground II, or *Ong*, *Hoff*, (*Shogase* and *Fare*) and *Rolf* in Ground III, Patent Owner reserves the right to address secondary considerations, if needed, later in these proceedings.

CONCLUSION

Petitioner Google has failed to establish that claims 1-13 are rendered obvious by any combination of the asserted prior art references. Therefore, institution by the Board of *inter partes* review is not appropriate, and the Board should deny the Petition.

Respectfully submitted,

December 26, 2024

/s/ *Robert Hart*

Robert Hart
Reg. No. 35,184
ADDYHART P.C.
2025 Guadalupe Street, Suite 260
Austin, TX 78705
949.337.0568
robert@addyhart.com

Meredith Martin Addy
Reg. No. 37,883
meredith@addyhart.com
ADDYHART P.C.
10 Glenlake Parkway, Suite 130
Atlanta, Georgia 30328
312.320.4200

Gregory B. Gulliver
Reg. No. 44,138
gbgulliver@addyhart.com
ADDYHART P.C.
401 N. Michigan Ave., Suite 1200-1
Chicago, Illinois 60611
847.984.3020

Counsel for Patent Owner
DH International Ltd.

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies service of Patent Owner DH International Ltd. served this Patent Owner's Preliminary Response on the counsel of record for Petitioner Google LLC by filing this document through the P-TACTS, as well as delivering a copy via electronic mail to the following:

Erika H. Arner
erika.arner@finnegan.com

Kara A. Specht
kara.specht@finnegan.com

Christopher B. Anderson
christoper.anderson@finnigan.com

Safiya Aguilar
safiya.aguilar@finnegan.com

Date: December 26, 2024

By: /s/ *Robert Hart*
Robert Hart

CERTIFICATE OF COMPLIANCE

This Petition complies with the type-volume limitations as mandated in 37 C.F.R. § 42.24, totaling 10,911 words. Counsel has relied upon the word count feature provided in Microsoft® Word for Mac Version 16.661.

Dated: December 26, 2024

By: /s/ *Robert Hart*
Robert Hart