EXHIBIT 2013a

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC.

Petitioner,

v.

VOIP-PAL.COM, INC.,

Patent Owner

Case No. IPR2022-01072
U.S. Patent 8,630,234

DECLARATION OF WILLIAM HENRY MANGIONE-SMITH IN SUPPORT OF PATENT OWNER'S PRELIMINARY PATENT OWNER RESPONSE (POPR)

I, William Henry Mangione-Smith, declare:

I. Introduction

1. I have personal knowledge of the facts contained in this declaration and, if called as a witness, I could competently testify to those facts. I have been requested by VoIP-Pal.com Inc. ("VoIP-Pal") to provide this expert declaration in support of its response as an expert in the field of computer science, computer communications, and related technology. I have no financial interest in the '234 or '721 Patents. I am being compensated at my normal consulting rate. My compensation does not depend on and in no way affects the substance of my statements in this Declaration. In forming my opinions for this Declaration, I have adopted the perspective of a one of ordinary skill in the art as of the priority date ("POSITA"), defined as follows: a POSITA would be someone with an undergraduate degree in either Computer Science, Computer Engineering, Electrical Engineering, or a closely related discipline. I believe that such a person would likely have about 2 years of experience in system-level development but a greater degree of professional experience could serve to replace some formal education and a greater degree of formal education could replace some professional experience.

II. Qualifications

2. My technical background covers most aspects of computer system design, including low level circuitry, computer architecture, computer networking, graphics, application software, client-server application, Web technology, and system software (*e.g.*, operating systems and compilers). I am a member of the Institute of Electrical and

Electronics Engineers and the Association for Computing Machinery, which are the two most significant professional organizations in the computer field. I have been employed as a design engineer, research engineer, professor and technical expert. Over my professional career I have been an active inventor with at least 121 issued U.S. patents, 206 published and pending U.S. patent applications and many unpublished U.S. patent applications.

3. From 1984 until 1991 I attended the University of Michigan in Ann Arbor, Michigan. I was awarded the degrees of Bachelor of Science and Engineering, Master of Science and Engineering, and Doctor of Philosophy. My doctoral research focused on high-performance computing systems including computer architecture, applications and operating system software, and compiler technology. One of my responsibilities during my graduate studies included teaching senior undergraduate students who were about to enter the profession.

4. After graduating from the University of Michigan I was employed by Motorola in Schaumburg, Illinois. At Motorola, I was part of a team designing and manufacturing the first commercial battery-powered product capable of communicating Internet email over a wireless (i.e., radio frequency) link and one of the first personal digital assistants. I also served as lead architect on the second-generation of this device. My responsibilities at Motorola included the specification, design, and testing of system control Application-Specific Integrated Circuits ("ASICs"). I conducted the initial research and advanced design that resulted in the Motorola M*Core embedded

microprocessor. M*Core was designed to provide the high performance of desktop microprocessors with the low power of contemporaneous embedded processors. The M*Core received widespread use in several communications products including various telephone handsets, advanced pagers, and embedded infrastructure. While at Motorola I was also the sole inventor on one U.S. patent.

5. From 1995 until 2005 I was employed by the University of California at Los Angeles ("UCLA") as a professor of Electrical Engineering. I was the director of the laboratory for Compiler and Architecture Research in Embedded Systems ("CARES") and served as the field chair for Embedded Computing Systems. The CARES research team focused on research, engineering and design challenges in the context of battery-powered and multi-media mobile computing devices. One of the key developments of my lab was the Mediabench software tool, which is widely used to design and evaluate multi-media embedded devices. Key elements of Mediabench include software that is essential for modern digital telephony. My primary responsibility, in addition to classroom teaching, involved directing the research and training of graduate students. I was a tenured member of the faculty and had responsibilities for teaching as well as scholarly research. While at UCLA I was a named inventor on three U.S. patent applications. My colleagues at UCLA were some of the leading scientists and engineers in the world with a long list of innovations from computer network security devices to the nicotine patch. The graduate student researchers in my laboratory came from a diverse set of backgrounds, all with

undergraduate degrees in computer engineering, electrical engineering or computer science. Many of them had multiple years of experience working as professional engineers in areas such as software development, computer system design and ASIC circuit design.

6. From 2005 until 2009, I was employed at Intellectual Ventures in Bellevue, Washington. My responsibilities at Intellectual Ventures included business development, technology assessment, market forecasting, university outreach, collaborative inventing, intellectual property licensing support, and intellectual property asset pricing. My colleagues and co-inventors at Intellectual Ventures included the former lead intellectual property strategist at Intel, Intel's lead IP council, Microsoft's chief software architect, the founder of Microsoft research, the designer of the Mach operating system, the architect of the U.S. Defense Department's Strategic Defense Initiative, the founder of Thinking Machines (a seminal parallel-processing computer system), and Bill Gates. I was responsible for hiring and managing over 15 staff members including multiple Ph.Ds. with degrees in engineering or science with decades of experience in product design and engineering.

7. A brief summary of some of my qualifications for the facts and understandings stated in this declaration are as follows: I have more than 27 years of experience as a computer architect, computer system designer, educator, and as an executive in the PC and electronics business. I am also a member of a number of professional associations, such as the ACM, IEEE and have been intimately involved in

professional research through the International Symposium on Microarchitecture (Program Chair for 26th and General Chair for 36th), IEEE Transactions on Computers (Associate Editor), ACM Transactions on Embedded Computing Systems (Associate Editor), and IEEE Computer (Associate Editor). I also have been on the program committees for many computer conferences, including a Network Processors Workshop. For further details regarding my employment and academic history, please refer to my curriculum vitae (Ex. A).

III. Task

8. I have been asked to comment on the relationship between a phone number that is assigned to a mobile phone and its location. I have also been asked to explain whether the area code in the phone number assigned to a mobile phone can identify a location of the mobile phone. This issue is relevant to the patent claims because it bears upon whether a phone number with an area code would have been considered a "location identifier" identifying a location of the mobile phone or wireless device by a person of ordinary skill in the art ("POSITA"), at the time of invention, who had the qualifications that were set forth above at the beginning of this declaration. The claims of U.S. Patent No. 8,630,234 ("the '234 patent") and U.S. Patent No. 10,880,721 ("the '721 patent") recite a "location identifier" in their claims.

9. The present IPR challenges independent claims 1, 11, and 20 of the '234 Patent, all of which use the term "location identifier." More particularly, the challenged independent claims of the '234 Patent recite, in part:

Claim 1:

> "1. A method of roaming with a mobile telephone, the method comprising:" […] "transmitting an access code request message to an access server to seek an access code" […] "said access code request message including said callee identifier and a **location identifier** separate and distinctive from said callee identifier, **said location identifier identifying a location of the mobile telephone**";

Claim 11:

> "11. A mobile telephone apparatus comprising:" […] "transmitting means for transmitting an access code request message to an access server to seek an access code" […] "said access code request message including said callee identifier and a **location identifier** separate and distinctive from said callee identifier, **said location identifier identifying a location of the mobile telephone**;"

Claim 20:

> "20. A mobile telephone apparatus comprising:
>
> a processor circuit;
>
> a network interface in communication with said processor circuit; and
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> a computer readable medium in communication with said processor circuit and encoded with codes for directing said processor circuit to: […]"
>
> "cause an access code request message to be transmitted to an access server to seek an access code […] said access code request message including said callee identifier and a **location identifier** separate and distinctive from said callee identifier, **said location identifier identifying a location of the mobile telephone**;"
>
> [See '234 Patent, emphasis added]

10. This is not the first time I have provided testimony for VoIP-Pal. For example, I provided expert declarations and deposition testimony in *inter partes* reviews (IPR2016-01198 and IPR2016-01201) relating to two of VoIP-Pal's patents,

namely, U.S. Patent No. 8,542,815 ("the '815 Patent") and U.S. Patent No. 9,179,005 ("the '005 Patent"). I have also previously submitted a declaration regarding the '606 patent. *See* Case No. 5:20-cv-2397-LHK, Dkt. No. 52-1; Case No. 5:20-cv-2460-LHK, Dkt. No. 62-1; Case No. 5:20-cv-2995-LHK, Dkt. No. 63-1. The above patents also relate to telecommunications. While I am not a lawyer and have no formal legal training, I am a prolific inventor with many issued Patents, I have worked at the intersection of patents and computer technology for at least 15 years, and I have provided expert testimony in many patent cases. In making the statements contained in this declaration, I have relied on my education in engineering, 30+ years of professional experience, the documents cited in this declaration, and my previous work for VoIP-Pal which involved reviewing the documents below.

- The Challenged Patents in this IPR, also collectively referred to as the "Mobile Gateway patents," namely, U.S. Patent No. 8,630,234 ("the '234 patent") and U.S. Patent No. 10,880,721 ("the '721 patent");
- The "RBR family of patents" owned by VoIP-Pal, collectively including: U.S. Patent No. 8,542,815 ("the '815 Patent"), U.S. Patent No. 9,179,005 ("the '005 Patent"), U.S. Patent No. 9,537,762 ("the '762 patent"), U.S. Patent No. 9,813,330 ("the '330 patent"), U.S. Patent No. 9,826,002 ("the '002 patent"), U.S. Patent No. 9,948,549 ("the '549 patent"), U.S. Patent No. 9,935,872 ("the '872 patent"), and U.S. Patent No. 10,218,606 ("the '606 patent");

- Documents filed in IPR2016-01198 and IPR2016-01201 (*inter partes* reviews relating to the parent '815 and '005 Patents), including file histories, inventor declarations, prior art, telecommunications dictionaries, and reference works.

IV. MOBILE PHONE LOCATION AND AREA CODES

11. A phone number that is assigned to a mobile phone within the United States of America includes an "area code" portion, however, the area code does not identify the location of the *phone*. The point of having a mobile phone is to have telephone service while being mobile. The location of a mobile phone can change to outside of the geographical boundary of an area code, including the area code in the phone number. Indeed, the mobile phone need not operate at all within the area code boundaries of its phone number. For example, a mobile phone user can travel with the phone regionally or nationwide across area code boundaries while either staying within their own wireless carrier's network or receiving service from another wireless carrier with which their own carrier has agreements at an additional charge ("roaming charges").

12. Many researchers and pollsters performing research by dialing phone numbers randomly and then trying to correlate locations to the numbers called, have complained that this process is inaccurate and liable to error. Consider an article by Marken, Stephanie, Manas Chattopadhyay, and Anna Cahn. 2019, entitled "Geographic

Inaccuracy of Cellphone Samples." Survey Practice 12 (1) (hereinafter, "Marken").[1] Marken explains:

> "[T]he geographic location for a cellphone number is typically based on the cellphone rate center—the location in which the cellphone was purchased. Therefore, the information derived from a cellphone number may be inaccurate if the cellphone is purchased at a location different from where the cellphone owner resides or if the owner moves after the cellphone purchase."

13. Another article is by Benjamin Skalland, Meena Khare, entitled "Geographic Inaccuracy of Cell Phone Samples and the Effect on Telephone Survey Bias, Variance, and Cost," Journal of Survey Statistics and Methodology, Volume 1, Issue 1, May 2013, Pages 45–65, https://doi.org/10.1093/jssam/smt001 (hereinafter, "Skalland").[2] Skalland's journal article Abstract states:

> "Prior to sampling, geographic information can be derived from landline telephone numbers with great accuracy, allowing for state-specific landline random digit dial (RDD) surveys and effective geographic stratification for national RDD surveys producing state-level estimates. However, the assignment of geographic information to cell phone numbers is problematic because the number is associated with the place the service was originally acquired, which is not necessarily the place where the person currently resides: a person could have acquired the service in a different state from the state of residence or could have moved to a different state since activation."

14. A further article is Leah Christian, Michael Dimock and Scott Keeter, "Accurately Locating Where Wireless Respondents Live Requires More Than A Phone

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[1] Available online at: <https://www.surveypractice.org/article/8275-geographic-inaccuracy-of-cellphone-samples>

[2] Available online at: <https://academic.oup.com/jssam/article-abstract/1/1/45/942585>

Number," Pew Research Center, July 9, 2009 (hereinafter, "Christian").[3] Christian tried to estimate the inaccuracy of the area ostensibly implied by phone number data by matching it to zip codes. As for the results of the research, she says: "Accurately Locating Where Wireless Respondents Live Requires More Than A Phone Number." Christian found that the phone number data when compared to the zip code data frequently failed to accurately reflect where persons lived. Among cell-phone-only adults, *e.g.*, she found that "6% are not matched at the regional level, 12% at the state level and 43% at the county level." It appeared that about 12 percent of cell-only adults lived in a state that differed from the one associated with their cell phone number (crossing a state boundary would likely represent a change of zip code and area code). Notably, Christian did not attempt to study how many cell phone users crossed state lines while regularly commuting to work or school, and who thus spent much of their time in an area code not associated with their phone number. Presumably, the number of such persons would have been much greater, as I will further explain below.

15. When a mobile phone user begins to travel, the location of the mobile phone cannot be predicted from the area code, which is static. It is not unusual for people to commute across the boundaries of area codes. Data scientist Seth Kadish plotted a visualization illustrating how widespread is the phenomenon of commuting

[3] Available online at: <https://www.pewresearch.org/2009/07/09/accurately-locating-where-wireless-respondents-live-requires-more-than-a-phone-number/>

across state lines—and consequently, across area codes boundaries.[4] According to Kadish, nine counties have greater than 50% commuting to a different state. *Id*. In response to people who commute to a different state and those who frequently travel outside of their mobile phone's home areas, the wireless carriers have devised tremendously popular regional and national plans, which eliminate roaming fees and/or long-distance fees. AT&T had a "Digital One Rate" plan which was so popular that its performance got bogged down.[5] Verizon introduced a five-state home calling area for those who wanted to travel throughout five Southwestern states free of roaming charges.[6] In their press release dated August 22, 2000, Verizon stated, "We've found that most wireless users are regional roamers who frequently travel to nearby states and make numerous calls within the city they're visiting … By eliminating roaming charges, our new Regional Calling plans provide a simple, affordable solution for our customers who wish to use their wireless phone as they travel throughout Arizona, New Mexico, California, Nevada and Hawaii." In a press release dated January 31, 2022, Verizon unveiled a new national rate plan with a coast-to-coast footprint as a home calling area and free long distance.[7] With people traveling regionally or even nationally, one cannot rely on their "area code" to determine their phone's location.

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[4] Accessible online at: <https://vizual-statistix.tumblr.com/post/112700015626/if-you-are-employed-unless-you-work-from-home>
[5] Walt Mossberg, "AT&T's One-Rate Plan Falls Short of Promise," Wall Street Journal, July 8, 1999, accessible online at: <https://www.wsj.com/articles/SB931383803177249362>
[6] Accessible online at: <https://www.verizon.com/about/news/vzw/2000/08/pr2000-08-22>
[7] Accessible online at: <https://www.verizon.com/about/news/press-releases/verizon-wireless-new-national-rate-plan-provides-superior-value-frequentcalling-travelers>

16. U.S. Patent Publication No. 2012/0253957 ("Bakshi") points out that ordinary techniques for obtaining a mobile phone's location may not work if the mobile phone roams "out-of-network," such as when the phone is traveling internationally:[8]

> "[W]ith the modern ubiquity of foreign travel, the ability to remotely and reliably locate an individual, in either a commercial or personal context, is frequently desirable. Current techniques for determining the physical location of an individual who is traveling involve obtaining the location of a mobile subscriber terminal, e.g., a cell phone, smart phone, or other wireless telecommunication device, by issuing a request to the operational support system of the individual's wireless communication service provider. For example, the Home Location Register (HLR) of a service provider can identify the Mobile Switching Center (MSC) that is serving a particular mobile subscriber terminal and thereby determine an approximate geographical location of the mobile subscriber terminal. However, such an approach for locating a user assumes that the user of the mobile subscriber terminal is in-network and consequently the approach does not work when the user travels out-of-network, e.g., to a foreign country.
>
> Accordingly, there is also a need in the art for reliably and remotely locating a user of a mobile subscriber terminal when the user roams out of the home service network.

17. Changing the phone number of a phone (i.e., to thereby update the "area code") by using a new SIM card in the foreign country, does not necessarily provide a phone number with an area code that is up to date with the phone's location. The U.K., for example, uses "07" as a non-geographic prefix for all mobile telephones, but this is not an "area code" and does not designate any area.[9] The U.K. also has numbers beginning with 070, which are "personal numbers" or "virtual numbers" that are non-

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[8] Accessible online at: <https://patents.google.com/patent/US20120253957A1/en>
[9] Accessible online at: <https://en.wikipedia.org/wiki/Telephone_numbers_in_the_United_Kingdom>

geographic in nature. *Id*. In summary, what sometimes appears to be an "area code" may actually convey *no* location information, despite the original meaning of the term.

18. It appears that Voice-over-IP services in the U.S. also provided virtual phone numbers since at least 2003. Virtual phone numbers have an "area code" that is chosen by the user, therefore a virtual number does not necessarily reflect anything about the user's location or the location of the user's phone. Kosmaz Technologies LLC advertised a service called "VoIPVoIP" with wide-ranging features including allowing users to bring their own device, use a PC Softphone, or use VoIP from a mobile phone.[10] J2 Global advertised a virtual PBX and an eVoice service, by saying: "Now small business owners can easily open new virtual offices in potential cities where they would like to do business. By adding new local numbers, they're able to easily expand their business into cities all over the country."[11] J2Global also advertised a virtual e-fax service that offered local fax numbers in area codes across the country."[12]

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[10] Accessible online at:
<https://web.archive.org/web/20080413105830/https://www.voipvoip.com/virtual-number-support/how.html>, <https://web.archive.org/web/20080420102205/http://www.voipvoip.com/byod/>, <https://web.archive.org/web/20140325231311/https://voipvoip.com/bria/android-bria-settings.html/>, https://web.archive.org/web/20080404053354/https://voipvoip.com/xlite-softphone/, <https://web.archive.org/web/20080518035041/http://www.voipvoip.com/mobile-voip/>, <https://web.archive.org/web/20080521084919/http://www.voipvoip.com/business-voip/>

[11] Accessible online at:
<https://web.archive.org/web/20091008111915/http://www.evoice.com/resources/local-number.html>, <https://web.archive.org/web/20100527043406/https://www.ereceptionist.co.uk/ereceptionist/dms/ereceptionist/pdf/en/erstartguide.pdf>

[12] Accessible online:
<https://web.archive.org/web/20080919195502/http://www.efax.com/products/corporate-fax-solutions>, <https://web.archive.org/web/20011202062738/http://www.efax.com/products/corporate/>, <https://web.archive.org/web/20011104042012/http://www.efax.com/products/plus/>; see also: <https://web.archive.org/web/20101226070008/http://assets.j2global.com:80/www.efaxcorporate.com/ef

Other services which apparently advertised virtual phone lines were GrandCentral[13] and Super Technologies, Inc's VirtualPhoneLine service.[14] Wired magazine wrote an article in 2003 entitled "Pick an Area Code, Any Area Code."[15] Vonage, too, advertised virtual phone numbers:[16]

> "Virtual Phone Numbers are very inexpensive secondary numbers that ring to your primary Vonage line. The advantage is that people outside your local calling area can call you for the price of a local call if you choose a virtual phone number in their area code. Virtual numbers make it easier for people to keep in touch with you because they can call you for the price of a local call. …
>
> How can I use this?
>
> Let's say that you live in New York and your Vonage primary number is in area code 718. Your mom lives in Florida. Her area code is 561. You could get a secondary virtual phone number in area code 561 that rings to your 718 line. Then mom doesn't have to pay long distance charges when she calls you.
>
> You can have as many Virtual Numbers as you like, and they're activated immediately.
>
> Business users love them too. Imagine having business cards with New York, Chicago, and Los Angeles satellite office numbers for less than $5.00 each. Now local clients can dial you without dialing long distance. And you get the local presence without all the expensive overhead."

19. It is worth mentioning that the Patent Owner's predecessor company also designed a Voice-over-IP (VoIP) system that could provide virtual phone numbers to

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axcorp-cms-public/dms/corporate/resources/pdf/User-Guide.pdf>, <https://web.archive.org/web/20121231213726/http://assets.j2global.com/features>

[13] Accessible online: <https://www.nytimes.com/2007/03/15/technology/15pogue.html>

[14] Accessible online at: <https://web.archive.org/web/20001109100000/http://www.virtualphoneline.com/about.html>

[15] Accessible online at: <https://www.wired.com/2003/07/pick-an-area-code-any-area-code-8230/>

people, e.g., the phone number of the subscriber could have an area code that did not match the location of either their phone or where they lived. The '234 Patent incorporates by reference a detailed description of VoIP-Pal's system (then provided by "Digifonica"), namely, as described in PCT Publication No. WO 2008/052340.[17] See '234 Patent at 8:33-38. In PCT Publication No. WO 2008/052340 at Figure 14 (item 285) and pp, 38-39, the Calgary subscriber is assigned a phone number of "1-604-867-5309" with an area code of "604", which is the area code for British Columbia, whereas Calgary is a city in Alberta having an area code of "403." In other words, the area code of the Calgary user's phone number does not reflect his or her location; if anything, it may imply a location in Vancouver, B.C., but that is the nature of a virtual phone number—it has an area code that does not reflect the caller's location. In the '234 Patent, embodiments of the invention are expressly stated to be implemented in the context of VoIP-enabled mobile phones. See '234 Patent at 8:33-38, 13:49-58 ("if the mobile phone is capable of voice over IP communications").

20. I was also asked to explain whether calling within the same area code meant that a call was toll-free. Not always. According to the FCC, in the case of "Local Toll Service (also known as IntraLATA toll, local long distance or regional toll service), … local toll calls include calls outside your local exchange area, but within your area code… Per-minute toll charges often apply to these calls, unless they are

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[16] Accessible online at: <https://web.archive.org/web/20040611022134/http://vonage.com/features_virtual_phone_number.php>
[17] Available online at: <https://patents.google.com/patent/WO2008052340A1>

included in a local/long distance service bundle. Most local toll calls take place within a single state, although there are some instances in which these calls cross state lines."[18]

21. In summary, independent Claims 1, 11 and 20 of the '234 Patent require a "location identifier" that is "identifying a location of a mobile phone." An "area code" associated with the phone number assigned to the mobile phone does not provide this information. Historically, when everyone used land-lines that were fixed at a particular known location, the concept of "area code" did connect to the location of the phone. But that has changed with the advent of mobile phones and voice-over-IP phones, going back to at least 2003 in the United States. At best, a mobile phone's area code identifies the location of a rate center where a phone (not necessarily the phone in use, but rather often an older phone owned by the same user) was bought, perhaps some time ago, and may not reflect the place where the owner lived or where the owner currently lives. Furthermore, in the past the "area code" represented a static measure of location for land-line phones, but mobile phones are meant to move—and they are not limited to the area implied by their area code. Often, they cross state lines or area code boundaries for the purpose of commuting to and from work or school. Indeed, the popularity of the wireless carriers' regional plans and national plans, which eliminate roaming fees and/or long-distance fees over a region or nationwide, indicate that people frequently travel outside of their home network and across area code boundaries. It would be absurd and impractical for an area code in the phone number of the cell phone to be

[18] Accessible online at: <https://www.fcc.gov/consumers/guides/local-local-toll-and-long-distance-

updated to reflect the location of the phone. International travel presents a thorny problem, too, since the phone number cannot be changed to represent the phone's location in a different country. Even if it were possible to change the phone number of the phone to reflect a cell phone number in the new country, some countries assign only non-geographic "area code"-like prefixes to cell phones, however, it is impossible for such a special prefix to provide any geographical information about the location of the phone. And furthermore, providers of Voice-over-IP (VoIP) services do not necessarily have restrictions tying a VoIP phone number to a particular geographical area—they have offered "virtual numbers" where a customer can select a phone number with a geographical area code in a completely different jurisdiction than where they live, work, or go to school. In Voice-over-IP, the "area code" may bear no relationship to any geographical information about you or your VoIP phone. For all these reasons, as explained above, an "area code" portion of a mobile phone number cannot identify the location of the mobile phone; at best, it may identify a location of where the mobile phone (or a predecessor phone) was *bought*, whereas in other cases, it reflects a non-geographical designation or a "virtual number".

22. Furthermore, CallerID does not reliably convey the true phone number of the caller because it can be spoofed[19] or suppressed.[20] Therefore, a system which relied on CallerID to determine the location of a calling phone would be inaccurate and

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calling>

[19] Available online at: <https://www.fcc.gov/spoofing>

unreliable, not only because the "area code" portion does not represent a mobile phone's location as explained above, but also because the CallerID can be faked or blocked by the caller (e.g., by using *67 or by setting the number to "Private").

23. This declaration comprises my true and honest statement of the facts, based upon my review of the technical documents, my educational background, my knowledge of prior communications methods, and my experience and knowledge as a professional and person of ordinary skill in the art for at least the last 25 years. I am prepared to provide verbal testimony and supplementary written declarations if needed.

I declare under penalty of perjury that the foregoing statements are true and correct, and that I have executed this declaration on September 22, 2022.

William Henry Mangione-Smith

[20] Available online at: <https://www.usatoday.com/story/tech/columnist/2020/06/04/kim-komando-has-5-tips-block-hide-your-number-when-making-calls/3138344001/>