### **Exhibit D**

#### 2016 CORRESPONDENCE - VOIP-PAL.COM INC & AT&T

From: SILVERMAN, ALEX (Legal) <a style="color: blue;">as4386@att.com</a>>

**Sent:** January 14, 2016 2:12 PM

To: Emil Malak

Cc: ray.leon@voip-pal.com Subject: Subject to FRE 408

Dear Mr. Malak – Please see attached letter, which is also being sent to you by post. – Alex

Alexander E. Silverman Executive Director – Senior Legal Counsel AT&T Services, Inc.

Office: 1-425-580-8418 Mobile: 1-206-724-7041 Email: <u>alex.silverman@att.com</u>



Alexander E. Silverman Executive Director - Senior Legal Counsel AT&T Mobility P.O. Box 97061 Redmond, WA 98073 USA T: 425.580.8418 F: 425.580.7825 alex.silverman@att.com

January 13, 2016

#### Sent via email to emil@emilmalak.ca, hardcopy to follow by post

**CONFIDENTIAL: SUBJECT TO U.S. FEDERAL RULE OF EVIDENCE 408** 

Mr. Emil Malak, CEO VoIP-Pal.com, Inc. 773 Hornsby Street Vancouver, BC V6Z1S4 CANADA

Dear Mr. Malak:

AT&T is in receipt of your letter of December 18, 2015, addressed to Mr. Randall Stephenson, which has been directed to my attention. Please direct future correspondence about this matter to me.

Kindly note that we have previously been in correspondence with Mr. Ray Leon of your office, most recently in an email dated December 16, 2015. We do not understand VoIP-Pal.com to be alleging that AT&T infringes any of the patents in what you term your "notice" and what Mr. Leon previously termed a "suite" of patents being offered for sale. If our understanding in this regard is incorrect, and you do mean to allege that AT&T infringes one or more patents, please send us claim charts that set forth, with specificity, how each of the limitations of identified patent claims covers a specific element or elements of identified AT&T products or services, so that we can understand the nature of any such allegations. If you are offering to sell us these assets absent an assertion that AT&T infringes, we appreciate your having contacted us, but we respectfully decline your offer. Many thanks.

Very truly yours,

Alexander E. Silverman

Ec (email only): Mr. Ray Leon

Werander E. Silverma

#### 2015 CORRESPONDENCE - VOIP-PAL.COM INC & AT&T



#### VoIP-Pal.com Inc. 10900 NE 4th Street, Suite 2300 Bellevue, WA 98004

December 18, 2015

Randall L. Stephenson Chairman and Chief Executive Officer AT&T 208 S. Akard St. Dallas, TX 75202

Re: VoIP-Pal.com Inc. Patent(s)

Dear Mr. Stephenson,

I am the Chief Executive Officer of VoIP-Pal.com Inc. (VoIP-Pal), a communications research and development company. On November 2, the United States Patent and Trademark Office issued our most recent patent, US 9179005, which is a continuation of US 8542815. The parent patent and its continuation patent deal with classification and routing of voice, text, messaging and video in a multi-nodal IP environment. I am writing to give your company notice of these patents and the related patents listed in Attachment A.

Please feel free to contact me directly to initiate a conversation about these patents. For your convenience, my contact information is as follows:

E-mail:

emil@emilmalak.ca

Telephone:

(604) 889-0516

Address:

773 Hornby Street

Vancouver, BC V6Z1S4

Canada

Respectfully,

Emil Malak

Chief Executive Officer and Director,

Cc.

Mr. David McAtee

General Counsel

EM/rt: enclosure

#### Attachment A VoIP-Pal.com, Inc., Active U.S. Patent Matters as of November 6, 2015

Country Code	Filing Date/ National Phase Entry Date	Application/ Patent Number	Title\Subject	File Status	
US	05/03/2010	8422507	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	IUNICATIONS AND Issued	
US	15/04/2013	9143608	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Issued	
US	17/07/2015	14/802929	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Pending	
US	01/03/2010	8542815	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Issued	
US	13/08/2013	9179005	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Issued	
US	17/09/2013	9137385	DETERMINING A TIME TO PERMIT A COMMUNICATIONS Issu		
US	17/09/2013	8774378	ALLOCATING CHARGES FOR COMMUNICATIONS SERVICES	Issued	
US	07/07/2014	14/325181	ALLOCATING CHARGES FOR COMMUNICATIONS SERVICES	Pending	
US	14/09/2015	14/853705	DETERMINING A TIME TO PERMIT A COMMUNICATIONS SESSION TO BE CONDUCTED	Pending	
US	07/10/2015	14/877570	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Pending	
US	05/03/2010	8537805	EMERGENCY ASSISTANCE CALLING FOR VOICE OVER IP COMMUNICATIONS SYSTEMS	Issued	
US	15/08/2013	13/968217	EMERGENCY ASSISTANCE CALLING FOR VOICE OVER IP COMMUNICATIONS SYSTEMS	Pending	
US	27/01/2011	8630234	MOBILE GATEWAY	Issued	
US	24/09/2013	14/035806	MOBILE GATEWAY	Pending	
US	16/03/2012	8,675,566	UNINTERRUPTED TRANSMISSION OF INTERNET Issued PROTOCOL TRANSMISSIONS DURING ENDPOINT CHANGES		
US	27/11/2013	9154417	UNINTERRUPTED TRANSMISSION OF INTERNET PROTOCOL TRANSMISSIONS DURING ENDPOINT CHANGES		
US	17/07/2015	14/802872	UNINTERRUPTED TRANSMISSION OF INTERNET PROTOCOL TRANSMISSIONS DURING ENDPOINT CHANGES	HANGES Pending	

### VoIP-Pal.com, Inc., Active Brazil, Canada, Europe, Indonesia, India Patent Matters as of November 6, 2015

Country Code	Filing Date/ National Phase Entry Date	Application Number	Title/Subject	File Status
BR	04/05/2009	PI0718312-7	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Awaiting Examination
BR	29/05/2009	PI0719682-2	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Awaiting Examination
CA	30/04/2009	2668025	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Allowed - Issue Fee Due April 14, 2016
CA	25/05/2009	2670510	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Pending
CA	24/09/2009	2681984	EMERGENCY ASSISTANCE CALLING FOR VOICE OVER IP COMMUNICATIONS SYSTEMS	Pending
CA	26/01/2011	2732148	MOBILE GATEWAY	Response Due Feb 18, 2016
CA	15/03/2013	2812174	UNINTERRUPTED TRANSMISSION OF INTERNET PROTOCOL TRANSMISSIONS DURING ENDPOINT CHANGES	Pending
EP	29/05/2009	7816106.4	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Awaiting Examination
EP	24/06/2009	7855436.7	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Awaiting Examination
EP	28/02/2011	9802316.1	MOBILE GATEWAY	Awaiting Examination
EP	17/04/2012	9849358.8	UNINTERRUPTED TRANSMISSION OF INTERNET PROTOCOL TRANSMISSIONS DURING ENDPOINT CHANGES	Allowed - Notice of Intention to grant rcvd July 2015
ID	01/05/2009	WOO 2009 01165	PRODUCING ROUTING MESSAGES FOR VOICE	Reinstated
ID .	01/03/2009	WOO 2009 01103	OVER IP COMMUNICATIONS	Reinstateu
ID	27/05/2009	WOO 2009 01414	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Response to outstanding Examiners Report filed Aug 31, 2015
IN	29/05/2009	1047/MUMNP/2009	PRODUCING ROUTING MESSAGES FOR VOICE OVER IP COMMUNICATIONS	Examination Requested
IN	29/06/2009	1227/MUMNP/2009	INTERCEPTING VOICE OVER IP COMMUNICATIONS AND OTHER DATA COMMUNICATIONS	Examination Requested

#### 2014 CORRESPONDENCE - VOIP-PAL.COM INC & AT&T



AT&T Services, Inc. One AT&T Way, Room 3A161 F: 908-532-1219 Bedminster, NJ 07921-0752

thomas.restaino@att.com

November 10, 2014

By email to: pterry@cedarbandcorp.com

Paul B. Terry, President & CEO Cedar Band Corporation 600 N. 100 E. Cedar City, UT 84721

Re: "AT&T Inc.'s Potential Acquisition of Voip-Pal.com, Inc. & its Related Disruptive Patents"

Dear Mr. Terry:

This is in response to your email of July 28, 2014, addressed to eleven AT&T executives, regarding the above referenced matter. I will be handling this matter for AT&T. Accordingly, please direct to me any future communication regarding this matter.

On June 10, 2014, a Mr. Thomas E. Sawyer of VoIP-Pal sent to Andy Giesse of AT&T an email referencing a package of material that Mr. Sawyer represented he had previously sent to Mr. Geisse relating to VoIP-Pal and soliciting AT&T's interest in certain technology. On July 15, 2014, I responded to Mr. Sawyer on behalf of Mr. Giesse. In my letter, I indicated that "AT&T has a policy of not entertaining or accepting unsolicited offers to analyze, license or purchase third party patents" and therefore declined Mr. Sawyer's offer. In an email dated July 19, 2014, Mr. Sawyer responded to my letter, indicating that "[i]t was not the intent of [his] earlier communication to Mr. Giesse to serve as an allegation of infringement" and stating that "there will be no future communications regarding the [VoIP-Pal] patented technology......." Then, to our surprise, on July 28, 2014 you sent your email to eleven AT&T executives on the same subject matter.

As I indicated to Mr. Sawyer, AT&T has a policy of not entertaining or accepting unsolicited offers to analyze, license or purchase third party patents or technology or, in the context of your subsequent email, engaging in unsolicited corporate-related discussions pertaining to such patents or technology. This policy helps us to avoid misunderstandings and potential disputes. Therefore, we respectfully decline to consider your offer regarding the above referenced matter. In accordance with our policy, I will not distribute your communication to anyone.



By email to: <a href="mailto:pterry@cedarbandcorp.com">pterry@cedarbandcorp.com</a>

Page 2

Paul B. Terry

Cedar Band Corporation November 10, 2014

I note that Mr. Sawyer stated in his email of July 19 that VoIP-Pal is not making any allegations of infringement or misappropriation against AT&T, and we appreciate his forthrightness in that regard.

Please do not send any further communications regarding this matter to anyone at AT&T other than me. We hope you understand our position in this matter.

Very truly yours,

Thomas A. Restaino

Chief Intellectual Property Counsel

Thomas Atrolis

Cc:

By email to: <a href="mailto:tesawyer@tesawyer.com">tesawyer@tesawyer.com</a>

Thomas E. Sawyer, Ph.D., Chairman and CEO

Voip-Pal.com, Inc.

From: Paul Terry [mailto:pterry@cedarbandcorp.com]  Sent: Monday, July 28, 2014  To: Company Executives  Subject: 's Potential Acquisition of Voip-Pal.com, Inc. & its Related Disruptive Patents Importance: High  Sensitivity: Confidential
FOR IMMEDIATE REVIEW & CONSIDERATION – NOT FOR GENERAL DISTRIBUTION
Management Team:
Please forgive the unsolicited correspondence, but I wanted to broach the above Subject with the
Upon your review of the attached documents, and if you have an interest in further discussing with my Chairmar and the executive management team of Voip-Pal.com, Inc., then please advise, and I will make the necessary electronic and/or telephonic introductions between you and Voip-Pal.com, Inc. ( <a href="http://finance.yahoo.com/news/voip-pal-com-inc-provides-090000173.html">http://finance.yahoo.com/news/voip-pal-com-inc-provides-090000173.html</a> )
Thank you, gentlemen, for allowing me to consume a moment of your busy schedules as I invite you to read, review and consider the attached contents of my email. We've received substantive interest from various IP-focused firms and companies, including NPE's/PAE's, e.g., Intellectual Ventures, but are currently slow rolling any further discussions with specific NPE's/PAE's in favor of furthering discussions with practicing entities and wireless telecommunications operators, e.g., Idea. The market leads us to believe that Voip-Pal.com's patents, specifically the patents related to Lawful Intercept, Rating Billing Routing (RBR), and Mobile Gateway, contain considerable disruptive scope, and we truly believe that the owner of Voip-Pal.com's patent portfolio will contro the VoIP industry, and thus be the master of this massive revenue stream.
With kindest regards,
2001

Paul

Paul B. Terry President & CEO Cedar Band Corporation

| 600 N. 100 E. | Cedar City, UT | 84721 | | 435-865-2047 (P) | 435-867-5789 (F) | 435-477-2226 (C) | | <u>pterry@cedarbandcorp.com</u> | <u>www.cedarbandcorp.com</u> |



A tribally owned Family of Companies: Suh'dutsing Telecom | Suh'dutsing Technologies | Suh'dutsing Staffing Services | Suh'dutsing Aerospace | S&T Services | CBC Mortgage Agency | CBC BevCo | CBC Distribution Company | Cedar Band Trading Post

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# VOIP-PAL THE WORLD IS CALLING!

INVENTIONS, INNOVATIONS, AND INTELLECTUAL PROPERTY 2014

FOR INTERNAL USE

### Who is Voip-Pal?

- Publicly Traded Corporation (OTC Pink: <u>VPLM</u>)
- Creator of Disruptive VoIP Patent Portfolio
- Spent Over 16 Million Dollars and More Than a Decade to Develop its Intellectual Property
- 5 Core and Foundational VoIP Patents Plus Multiple Continuation Patents
- Voip-Pal Technology is Currently Being Used by Many Industry Leaders
- Led by a World Class Board of Directors



### Voip-Pal Directors



#### Dr. Thomas E. Sawyer - Chairman, CEO

- Former Chairman and CEO of NACT Telecommunications, Inc.
- Former Chief Technology Officer of Global Light Telecommunications, Inc.
- Over 45 years of technical and managerial experience in hightechnology industries, government, and university faculties
- Has served as a senior advisor to four U.S. Presidents: Nixon, Ford, Reagan, and George H. W. Bush.
- Marine veteran of the Korean War



#### Dr. Colin Tucker - Deputy Chairman & Director

- Former Director and CEO of Hutchison 3G,
- One of the three founding directors of Orange plc
- Sold Orange plc to France Telecom for \$38 billion
- Currently serving as Director of four companies
- Studied Electrical Engineering at Manchester University
- Over 30 years experience in the telecommunications and electronics industries.
- Listed as one of the 8 key people to know in the Telecommunications sector by Financial Times



### Voip-Pal Directors





#### **Professor Edwin Candy - Director**

- Former Technology Director for Hutchison 3G,
- Served as Group Development Director for Simoco
- Served as Technology Director for Orange
- Current Strategic Technology advisor for the 3 Group
- provides innovation guidance, strategic advice and consultancy services through his own company Strategitel Limited.

#### **Dennis Chang – President & Director**

- Started a \$100M US computer manufacturing company in the 1980s.
- In 1988, Mr. Chang was included in the *MicroTimes* list of the 100 most influential people in the microcomputer industry.
- Nominated as a 1989 finalist for "Entrepreneur of the Year" by Ernst & Young



### Voip-Pal's Five Core, Foundational VoIP Patents

- Lawful Intercept (USPTO No. 8,422,507)
- Routing, Billing and Rating (USPTO No. 8,542,815)
- Mobile Gateway (USPTO No. 8,630,234)
- Enhanced 911 (USPTO No. 8,537,805)
- Advanced Interoperability Solutions (USPTO No. 8,675,566)



### Lawful Intercept

- Stealthily Intercepts all forms of VoIP Communications
  - VoIP to VoIP
  - VoIP to Landlines
  - o SMS
  - o MMS
- Replaces Obsolete Wiretapping Technology
- Microsoft's remarkably similar "Legal Intercept" patent application was applied for two years after Lawful Intercept and was REJECTED by the USPTO
- Various governments are considering legislating Lawful Intercept as a mandatory technology for any VoIP provider
- Many countries currently ban and or block Skype and other similar applications due to lack of undetected intercept capabilities



### Routing, Billing and Rating

- Most important architectural solution for VoIP
- Essential patent to all VoIP communications
- Foundation of any modern commercial VoIP system
- Defines the only patented method by which the majority of VoIP calls are metered and billed
- Billions of dollars in annual revenues according to internal pricing valuations based on industry standard pricing models
- Current infringements estimated to be billions of dollars
- Continuation patent has strengthened RBR and enhanced its billing aspect



### Enhanced 911

- Wireless telephones are not linked to a fixed location or address
- The major challenge for emergency response personnel is the ability to trace 9-1-1 calls from mobile or VoIP callers
- Currently 70% of all emergency calls to 9-1-1 are made via mobile or VoIP telephones and that number continues to increase.
- Provides the ability to call back the person making an emergency call to 9-1-1 in the event of a dropped VoIP connection.
- This Technology WILL SAVE LIVES



### Mobile Gateway

- Technology can be applied to any modern cell phone
- Sophisticated application using a telephone's existing mobile network enabling the user to make a long distance or international call at the local call billing rate
- All current commercial techniques for making cell phone internet calls require the users to make additional actions which are not necessary with the Mobile Gateway patent application
- Will revolutionize domestic and international long distance business mobile phone use
- European Union has voted to eliminate roaming charges within the EU by 2015
- ELIMINATES LONG DISTANCE ROAMING CHARGES FOR CALLS, TEXTS AND DATA



### Advanced Interoperability Solutions

- Uninterrupted transmission technology that allows seamless transition from one WiFi Internet access point to another
- Provides continuous, uninterrupted connectivity of a mobile device
- This technology gets stronger over time as Wi-Fi access points and VoLTE are expanding



### Countless Current Users of Voip-Pal Technology

- Call Routing System Vendors e.g.; Cisco, Nortel, Alcatel-Lucent, etc.
- Consumer VoIP Vendors e.g.; Vonage, Skype (Microsoft), Comcast, etc.
- Commercial VoIP Vendors e.g.; Ring Central, Jive, Vocalocity, Nextiva
- Mobile Carriers e.g.; Verizon, Virgin, Vodaphone, AT&T, Sprint, T-Mobile, etc.
- Local Exchange Carriers (ILECs and CLECs) AT&T,
   Verizon, Telepacific, Mitel
- Messaging Service Providers Twitter, Facebook/WhatsApp, etc



### Voip-Pal Technology Summary

- Patent portfolio provides all necessary technology to create and operate a fully functional and regulatory compliant worldwide TELCO
- Patents can potentially generate billions in immediate annual revenues by enforcing licensing fees on current infringements
- Allows governments and law enforcement agencies the ability conduct lawful interception of VoIP communications
- Visionary technology that will be essential to all present and future VoIP communications
- The owner of Voip-Pal's portfolio will control the VoIP Industry





## Inventions, Innovations, and Intellectual Property

May 2014

#### Introduction

Voip-Pal's intellectual property value is derived from 6 recently-issued USPTO patents; including one foundational patent and 5 others that build upon the former. Voip-Pal inventions described in these patents enhance the performance and value of VoIP implementations worldwide.

Voice over IP (Internet Protocol), or VoIP, has been and continues to be a green field for innovation that has spawned numerous inventions greatly benefitting consumers large and small across the globe. Brands such as Vonage, Skype, and Magic Jack are well-known retail VoIP implementations. However, VoIP is used in many other places that we may not realize and by practically every modern telephony system vendor, network supplier, and retail and wholesale carrier.

Whether you place a call directly through a VoIP service retailer or make a long-distance call over a traditional phone system or mobile carrier, you are likely to use VoIP somewhere along the way. In our everyday communications VoIP is rapidly expanding towards ubiquity. Wherever a metered VoIP call is routed, it is likely already benefitting from a Voip-Pal invention.

#### **Intellectual Property Assets**

- Routing, Billing, and Rating (RBR) This is the enabling invention, published in USPTO Publication #20100150328, that describes call VoIP call routing, metering, and billing mechanisms for IP and mixed IP/PSTN networks.
- 2. Lawful Intercept (LI) an adjunct invention, published in USPTO Publication #20100150138, elaborates methods for intercepting and recording VoIP-hosted calls as may be required, for example, to comply with surveillance orders.
- **3. Enhanced 911 Emergency Assistance (E911)** another adjunct invention, published in USPTO Publication #20100172345, which describes a robust emergency assistance platform for VoIP telephony implementations.
- **4. Mobile Gateway (MG)** –published in USPTO Publication #20100172345, is an invention utilizing VoIP delivered through mobile networks to drastically reduce international roaming charges for consumers while fortifying mobile network investments.
- **5. Uninterrupted VoIP** Described in US Patent # 8,675,566 B2 enables continuity of mobile VoIP calls.
- **6. RBR Billing Extension** technology elaborated in US Patent 8,542,815 B2 facilitates PSTN style billing of VoIP calls.

#### **Current Users of Inventions**

- Call Routing System Vendors e.g.; Cisco, Nortel, Alcatel-Lucent, etc.
- Consumer VoIP Vendors e.g.; Vonage, Skype (Microsoft), Comcast, etc.
- Commercial VoIP Vendors e.g.; Ring Central, Jive, Vocalocity, Nextiva
- Mobile Carriers e.g.; Verizon, Virgin, Vodaphone, AT&T, Sprint, T-Mobile, etc.
- Local Exchange Carriers (ILECs and CLECs) AT&T, Verizon, Telepacific, Mitel
- Messaging Service Providers Twitter

#### Value Delivered by Inventions

#### Routing, Billing, and Rating

As mentioned previously, the RBR invention lays the foundation for the remaining inventions. At the time of the RBR invention VoIP systems were in a nascent state. Few inventors working in the VoIP field at the time were experienced in and understood the discipline and standards at play in traditional telephony, the publicly switched telephone network (PSTN). Hence, VoIP implementations took distinct paths. Skype was built on-top of the same technology as Napster, the infamous technology deployed for distributing pirated music and movie content.

Voip-Pal inventors well understood the rigors, standards, and discipline required to move VoIP from the fringes into the mainstream. Rather than disregard hard-won knowledge from decades of building and operating PSTN switches and routers they applied what they knew to an emerging field where experienced practitioners were rare.

The call-to-action for Voip-Pal technology was to find order within chaos. Where PSTN networks were homogeneous, IP networks were and still are heterogeneous with growing diversity. Where PSTN networks were owned and controlled by large conglomerates; IP networks are controlled by no one but fortunately often connect to the Internet.

Routing and metering calls in a controlled environment where you know the location and performance of every point in the network is a simpler problem to solve than the one Voip-Pal technologists solved. Nonetheless, routing and metering calls is a very necessary activity for telecom vendors. In order to address this variability Voip-Pal engineers developed call classification mechanisms to describe and render appropriate treatment for call data regardless of the type of endpoints that are being connected.

Following patterns similar to those used by the giant telecoms Voip-Pal invented new technology to work over IP networks instead of PSTN networks. The result is:

- VoIP calls are frequently routed and metered in largely the same fashion as PSTN calls even though the networks are dissimilar
- VoIP calls more frequently integrate near seamlessly with PSTN networks and invisibly to callers
- VoIP calls are becoming more reliable
- VoIP calls are more readily controlled, regulated, and monitored thereby overcoming regulatory barriers
- In spite of their delivery across a publicly visible and available network, VoIP calls do not inherently expose a subscribers network location, structure, or credentials
- VoIP is steadily migrating from what was the fringes into the mainstream
- VoIP implementations are increasingly becoming more like Voip-Pal technology.

Because they are able to rely on Voip-Pal routing and metering inventions to make VoIP more manageable and reliable; system vendors, network providers, mobile carriers, and others are constantly extending the reach of VoIP.

#### **Lawful Intercept**

This invention presumes the implementation of a Voip-Pal infrastructure. Law enforcement agencies in most developed countries have long depended upon the ability of telecom networks to monitor call circuits. In the USA this practice has typically involved a court order and wire-tap of one form or another.

Location and device independence are some of the key benefits of VoIP. With this versatility you might imagine that you can never nail down the exact location or even the device in use by a subscriber. Traditional approaches to wiretaps will fall short and less exacting wiretap implementation for VoIP will also leave hints for knowledgeable parties that their account is being monitored.

Where a robust Voip-Pal RBR implementation is operational, the LI invention works seamlessly and efficiently. Some of its key benefits include:

- In spite of the unpredictable nature of VoIP, Voip-Pal enabled subscribers can be monitored without regard to their physical location or device.
- The VoIP Pal Lawful Intercept system completely obscures when a subscriber is being monitored
- The surveillance can be established or terminated with ease

This technology will prove invaluable to government agencies as they seek to thwart crimes and intervene in potential acts of terrorism.

#### 911 Emergency Assistance

In contrast to traditional terrestrial telephony, among the great advantages of VoIP in our connected world are that calls may be originated from innumerable locations, with a variety of devices, and for minimal cost. These advantages become inherent disadvantages in emergency situations where emergency responders cannot be sure of one's location or even necessarily how to re-contact those seeking assistance.

Those who have had their cell phones cut-off for non-payment know that among the first things lost are their phone numbers. These numbers become available for reassignment to new subscribers. However, by law their phones must remain operable for placing 911 calls for emergency assistance.

In situations with improvised communications or where those seeking assistance do not have active accounts with an assigned phone number (also called DIDs, or direct inward dial numbers) this invention provides emergency callers with temporarily-assigned phone numbers that are given to responders to be used to re-contact those seeking assistance. The invention relies on an innovation utilizing a pool of reserved phone numbers which are temporarily assigned to those reaching out for emergency assistance.

As VoIP becomes increasingly prevalent in our world this invention will increasingly save lives.

#### **Mobile Gateway**

Those who travel may have experienced the exorbitant fees charged for long-distance calls while *roaming* on *visited* cell networks. International travelers typically find these costs to be punitive or even crushing. International fees are frequently charged in dollars, rather than cents, per minute to visiting cell phone users.

The *Mobile Gateway* invention has the potential to provide a much less costly and more convenient alternative for travelling smartphone users.

As with the 911 invention, this innovation relies upon a pool of local phone (DID) numbers being held in reserve by your VoIP provider. It also utilizes a clever smartphone app that detects when a caller is dialing a long-distance number. In a mere instant the smartphone app and VoIP provider tricks the visited cell network by turning long-distance and international calls into local calls. Thus, the traveler incurs only local, rather than long-distance or international, calling fees.

For mobile providers this invention creates a sound alternative to VoIP over WiFi. It gives roaming cell phone users the convenience of calling from anywhere a mobile network footprint exists at a cost-level that will preclude seeking out low-cost or even free WiFi calling options.

#### **Uninterrupted VoIP Calls**

SIP and many other key technologies help to facilitate voice calls over IP networks. Further, widely deployed WiFi and Cellular Data network infrastructures provide IP connectivity in much of the developed and developing worlds. Practically speaking though, VoIP telephony has been geographically limited to wired networks (LANs), such as an in an office, or to WiFi networks within the confines of a single home, office, restaurant, hotel room, or hot spot – just so long as you don't move beyond the limited coverage area of your WiFi connection.

VoIP could not be mobile – until now! Enabled by technology described in the Uninterrupted Voip patent, VoIP calls can be handed-off from one IP network to another – in a similar fashion to a hand-off of a call from one cell tower to another. The technology in this patent enables calls to persist and be passed from one WiFi/IP network to another, or from a WiFi/IP Network to an LTE/IP network, or HSPA to an LTE network, or to any other kind of IP network that your mobile device might support.

There are several advantages for consumers and vendors of this technology:

- VoIP calls are generally lower cost than PSTN calls if not free
- Killer app for smart phones
- Use a tablet as smart video phone
- International mobile calls could be made at low or no cost
- Where you have bad wireless coverage in your home, business, or coffee shop you can use WiFi inside and step out and drive to work without losing or dropping your calls
- When wireless is oversubscribed for calls, WiFi makes a great substitute

#### **RBR Billing Extensions**

In a PSTN connected world the network and communications application are one in the same and they are metered and billed as one product. The network is built for a voice communications application and neither exists without the other. In contrast, where the world is connected with publicly available IP networks (the Internet) voice and other communications applications are built on top of the network. But network infrastructure does not constitute a convenient and readily available voice and video communications infrastructure and doesn't necessarily connect to and become billable through a PSTN network.

VoIP is becoming utilized and deployed where investors have the potential to earn a return on creating a reliable communications application on the top of the Internet and ensuring that it connects to PSTN networks both domestically and internationally. The success of Vonage, Magic Jack, OOMA and others show this. But they would not stand a chance of success if they could not connect to and be billed in conjunction with PSTN networks.

The technology described in this extension of the RBR patent enables businesses such as the abovementioned to exist and flourish and will support the creation of applications and infrastructure to support richer and innovative communications systems for decades to come.

As wireless communications companies seek to invest in and create richer communications standards for video communications utilizing VoLTE – everyone will want to have the same functions supported over WiFi and will not want to lose continuity. This technology will allow pure IP communications providers to connect, interact, meter, and bill in conjunction with these wireless providers.

#### Impact and Reach of Inventions

#### **Lawful Intercept**

No currently known applications

#### **Enhanced 911 Emergency Assistance**

No currently known applications

#### **Mobile Gateway**

No currently known applications

#### **Uninterrupted VoIP**

No currently known applications

#### **RBR Billing Extensions**

It is very likely that VoIP providers operating over broadband Internet connections are utilizing technology described in this patent. This technology is key for future growth and investment in the VoIP world that is growing each day.

#### Routing, Billing, and Rating

The applications of this patent are numerous and widespread. Its application is so far-reaching it is difficult to be sure of all the places and uses where it is being applied.

As discussed in the prior sections everywhere metered VoIP and PSTN (legacy telephony) intersect the RBR invention is being applied. In the telephony world whether over fixed lines or mobile, international or local, this invention is applied every day.

#### *Voice Communications*

VoIP is revolutionary in and of itself and since its invention has been applied widely throughout the legacy telephony world. In prior years, TDM (Time-division multiplexed) lines interconnected voice systems over the planet. Even though telephony experts can make a convincing argument that TDM networking is much more suited to the constraints and peculiarities of voice and video networks, the reality it is that applications and equipment to support IP communications have flooded the planet. And in spite of their apparent shortcomings are being deployed widely in connecting phone systems to one another.

When someone makes a phone call, they are connecting to a local voice network in order to speak with somebody else. If that local network was not connected to a larger network you would only be able to make a call to other customers of that local network. So that local network must connect to other local phone networks if you wish to speak to anyone outside of that immediate vicinity. In the past the lines connecting one local phone network to another local phone network were TDM lines of one kind or another. When you have a number of those lines you can rightfully call it a network.

More and more often the lines connecting one local phone network to another local phone network are IP communication lines, and frequently enough that network is simply the Internet.

Let's start though with VoIP. If you are a Vonage<sup>™</sup> customer and you call another Vonage customer you could complete a call only using an IP network. However, if you call a cell phone or land line, your call will have to connect with a network using a different type of communications network and you can be certain that your call with their customer will be classified and measured.

#### Hence:

- Most phone handsets support voice connections via a network technology other than VoIP, e.g.;
   PSTN, GSM, CDMA, etc.
- The corollary of this is that most local phone networks are delivering voice communications on everything but VoIP
- Telephone networks are increasingly interconnecting voice calls using IP networks, or Voice Over IP (Internet Protocol)
- Virtually all telephony providers are billing and are therefore metering calls that cross between VoIP and other realms of communication
- Because these activities require call classification, metering, and billing, virtually all voice operators are using the RBR invention

A pure VoIP operator that meters and bills is using the RBR invention

#### Messaging - SMS, MMS & Twitter

In the early 1980s a technology for sending short messages was described and proposed by some European engineers as part of the GSM (Global System for Mobile communications) specification. GSM has since become the predominant mobile voice communications protocol.

On the surface, the management components of a GSM network mimic those of a PSTN network. The innovation in this messaging protocol was that it was embedded in the control signaling, rather than the voice signaling, of the GSM network.

Control commands are relatively short in duration compared to the length of phone calls. The control pathways in a phone system are busy in short bursts for setting-up and tearing-down calls but otherwise are unoccupied. The control protocol for European phone system is called SS7 (Signaling System #7). The message protocol SMS (Short Message Service) was designed to operate within the short bursts typically used only for control signaling and complied perfectly with SS7 – its host protocol. And since a message doesn't need to actually connect one caller to another immediately so that they could speak in real time, it was a perfect use of that excess capacity built-in to most phone systems. Messages can be held in queue until the control network has the time to transmit them.

Eventually text messaging caught on to the point that today nearly 80% of mobile subscribers have access to SMS services.

SMS services, as you have just learned, are a component of most mobile phone networks. Those mobile networks meter and bill text messages and very often transmit those text messages to one another via VoIP networks utilizing the RBR invention.

MMS (Multimedia Messaging Service) is an extension of SMS where the SMS messaging system is used to transmit the internet locations of pictures, video, and other multimedia content. But it relies on SMS which relies on GSM/VoIP interoperability, which relies upon the RBR invention.

Twitter is a service that enables millions of people to stay in-touch with niche communities of like interests. Twitter messages (tweets) are transmitted via SMS, which utilizes RBR invention.

As you can see the application of the RBR invention is so widespread and involve many of the things that all of us in our 21<sup>st</sup> century world depend upon every day. RBR is a key invention to the interconnection of our planet's peoples.

#### **EXHIBIT "A"**

#### LIST OF ALL PATENTS OF DIGIFONICA (INTERNATIONAL) LIMITED

("Digifonica")

#### 1) Lawful Intercept (LI) - intercepting VoIP communications and other data communications

U.S. Patent Application Publication No: 20100150138

Application No: 12/517026; PCT/CA07/02150

Filing Date: November 29, 2007

U.S. Patent issued April 16, 2013, Number 8,422,507

Status: PCT International Phase Completed

Entered the National Phase in: Brazil, Canada, China, Europe, India, Indonesia, Korea, Malaysia, Mexico, Philippines,

Singapore, United States.

#### 2) Routing, Billing, and Rating engine (RBR) – producing routing messages for VoIP communications

U.S. Patent Application Publication No: 20100150328

Application No: 12/513147; PCT/CA07/01956

Filing Date: November 1, 2007

U.S. Patent issued September 24, 2013, Number 8,542,815

Status: PCT International Phase Completed

Entered the National Phase in: Brazil, Canada, China, Europe, India, Indonesia, Korea, Malaysia, Mexico, Philippines,

Singapore, United States

#### 3) Mobile Gateway

U.S. Patent Application Publication No: 20110122827 Application No: 13/056277; PCT/CA2009/001062

Filing Date: July 28, 2009

U.S. Patent issued January 14, 2014, Number 8,630,234

Status: PCT International Phase Completed

Entered the National Phase in: Canada, Europe, United States

#### 4) Enhanced 911 – emergency assistance calling for VoIP communications

U.S. Patent Application Publication No: 20100172345

Application No: 12/532989; PCT/CA2008/000545

Filing Date: July 28, 2009

U.S. Patent issued September 17, 2013, Number 8,537,805

Status: PCT International Phase Completed

Entered the National Phase in: Canada, Indonesia, Malaysia, Philippines, Singapore, United States

#### 5) <u>Advanced Interoperability Solutions – uninterrupted transmission of Internet protocol transmissions during endpoint changes</u>

U.S. Patent Application Publication No: 20120170574 Application No: 13/496864; PCT/CA2009/001317

Filing Date: September 17, 2009

U.S. Patent issue notification, effective date March 18, 2014, projected Number 8,675,566

Status: PCT International Phase in Progress

30-Month National Phase Deadline- March 15, 2012

#### 6) Allocating Charges for Communications Services

U.S. Patent Application Publication No: 20140016764

Application No: **14/029615** Filing Date: September 17, 2013

U.S. Patent Notice of Allowance mailed from USPTO February 27, 2014



### Voip-Pal.com, Inc.

An opportunity to acquire a suite of fundamental patents in IP telephony that cover peer to peer traffic management, IP integration with legacy networks, legal call intercept of IP and legacy communications, IP call tracing, and IP compatibility with regulated networks.

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July 28 2014

- \*Enhanced VoIP/legacy telephony service
- \*Royalties from existing infringing products and applications
- \*Royalties from hardware implementation of algorithms and systems
- \*Governmental contracts for taxing, undetectable interrupts, call tracing including 911, and other emergency or police uses



Voip-Pal Offers Multiple Potential Income Streams 201

- \*Fully compatible with legacy universal telephony numbering systems
- \*Manages seamless gateways and handoffs between legacy and VoIP networks
- \*Uninterrupted calls between and across fixed, mobile, and Wi-Fi networks

### Voip-Pal Patents Add Seamless Functionality Between VoIP and Legacy Networks



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- \*Any VoIP Networks that integrate IP and Legacy Networks (e.g., Vonage, Nextiva, Ring Central, Jive, 8X8, Inc., CenturyLink, etc.), likely infringe a Voip-Pal patent
- \*Texting, video, and image transfer are encompassed in Voip-Pal patents, which include another large number of likely infringers (e.g., Facebook, LinkedIn, Pinterest, Google, etc.)

Because Voip-Pal Patents Cover Fundamental VoIP Services Many Existing Applications and Products Likely Infringe Them

HE WORLD IS CALLING

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- \*Voip-Pal patents provide:
  - \*True 911 service for VoIP
  - \*Undetectable Intercepts for VoIP and legacy networks
  - \*Compatibility with regulated networks, allowing routing, billing, and rating of VoIP calls

Voip-Pal Patents
Enhance Emergency,
Taxing, Billing,
and Police Services



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## "One World"

Telephony from Voip-Pal

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#### One World – Disruptive Telephony

One World ("OW") is a worldwide disruptive network offering telephony everywhere -- between all telephone subscribers: fixed, mobile, & WiFi, free to OW subscribers and at local rates regardless of location



#### One World – Disruptive Telephony

- It is a cloud virtual telephone network constructed using the Internet and the Voip-Pal technologies that enables VoIP to be monetized
- \* It changes the structures of classic telephone company networks and businesses and prepares for the wholesale migration of telephony to all I/P and VoIP telephony
- \* Opens up the way for new business models

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#### One World – Disruptive Telephony

- It forges ahead of Apple, Google, and Microsoft in their attempts to create worldwide single operator networks
- \* It offers Telco performance and international reach, equivalent to the service available from any legacy network
- \* Builds upon new Internet Net Neutrality access laws



The belief of analysts that "there is no money in VoIP Telephony" is false.

BUT

The belief that "there is no money" in Peer to Peer VoIP

Telephony – is true.



Legacy Networks monetize by controlling traffic, access, and interconnect.

Voip-Pal technologies bring control to traffic, access, and interconnect, thereby creating massive revenues from VoIP.



# VoIP is intrinsic to the future of Telephony



#### The Voip-Pal technologies

\*Monetize VoIP Telephony

\*Protect the essential aspects
of VoIP telephony with six
fundamental patents



The Company that Owns the Voip-Pal Patents has the Key to Controlling VoIP
Telephony Across the World



### The Opportunity

\* Exploit existing Networks or the cloud using Voip-Pal technologies to create new revenue generating telephone or online Web services



#### The Network Opportunity (1)

- Using Voip-Pal technologies implement a Data MVNO based VoIP OTT service using mobile, fixed, or WiFi Networks
- \* Embed a VoIP App into Smart phones and supply a universal phone number to make and take calls as part of the Local & International Telephone network and retain the customer
- \* A VoIP mobile, fixed, & WiFi service, equivalent to the classic Telco performance and international reach, can be offered

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#### The Network Opportunity (2)

- \* Combine VoIP voice with online Web services platforms for person to person contact in Web transactions
- \* The Uninterrupted Voip-Pal technology ensures call transition and call handover between wireless networks
- \* The Voip-Pal Gateway ensures interconnectivity between classic and Internet systems



#### What Does the VoIP User Expect?

- \* A single phone number to make and receive calls from any universal telephone number
- \* Telco voice performance equivalence
- \* Unimpeded transition of active calls between fixed, mobile, & WiFi networks
- \* Support of all the Telco supplementary services, including toll free numbers, diverts, & premium numbers
- \* Low cost roaming and international tariffs
- \* Enhanced 911 Emergency calling services





#### What the VoIP Operator Needs (1)

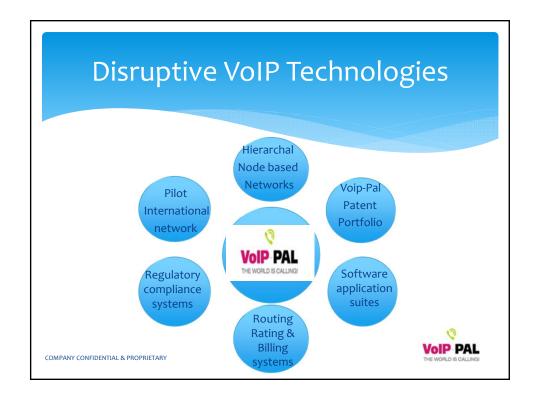
- \* The ability to create a low cost Virtual Telephone Network and monetize the voice services
- \* Telco service equivalence, including full support of international number system
- Routing, rating, billing, and call record equivalence to facilitate full integration with the International Telco system



#### What a VoIP Operator Needs (2)

- \* Seamless "in-call" transition between fixed, wireless, and mobile networks.
- \* Regulatory compliance including Legal Intercept
- \* Gateway systems to transition VoIP calls across networks, irrespective of Telephony, Internet, or Wireless delivery





#### Voip-Pal Technologies Offer (1)

- Leading edge hierarchal server Super Node /Node based architecture
- \* Telephony monetizing features including advanced Routing, Rating, and Billing functions and systems so that the VoIP service emulates Telco Network interfaces for full service equivalence
- \* Advanced Legal Intercept and Enhanced 911 emergency calling features
- \* Unique uninterrupted call features for call transition across fixed, VoIP, mobile, and WiFi Networks

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#### Voip-Pal Technologies Offer (2)

- Real time assessment of Internet connection performance and in call rerouting to ensure optimum call quality
- Cloud compatible architecture to facilitate implementation of Capex efficient Virtual Internet based networks
- Can be used to build either OTT or embedded VoIP based telephony networks in either fixed or Mobile networks
- \* VoLTE and CSFB alternative



#### Voip-Pal Technologies Offer (3)

- \* Disruptive telephony
- \* Monetized VoIP services
- \* "One World" virtual networks
- \* New Telco business models
- \* Universal numbering compatibility
- \* Voice services for online Web systems
- \* Legacy Telco network integration
- \* All I/P telephony evolution

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### Voip-Pal Technologies Offer (4)

- \* Consumer fixed telephony services
- \* Worldwide Telco service across the Internet providing universal access for all subscribers
- Local call equivalent rates for long distance and international calls using fixed, mobile, or WiFi services



# Companies Who Would Benefit from Voip-Pal

Any digital services provider or operator who wants or needs to establish and operate a worldwide virtual or cloud based revenue earning VoIP telephony system

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# Top Companies Who Would Benefit from Voip-Pal

#### Social/ Search Networks

\* Google, Yahoo, Facebook/ What's App, AOL, Mums Net

#### **Telco operators**

\* Tata Indicom, Telefonica, SK Telecom, America Movile, Softbank, Blackberry, AT&T, Verizon

#### **Web Services**

\* eBay, Amazon, Microsoft

#### **Vendors**

\* Cisco, Nokia, Alcatel



From: "JENDE, ARLENE F (Legal)" <a i style="color: blue;">aj6383@att.com>
To: "'tesawyer@tesawyer.com" <a href="tesawyer@tesawyer.com">tesawyer@tesawyer.com</a>>
Subject: FW: Correspondence from Thomas Restaino, AT&T

Date: Thu, 17 Jul 2014 15:26:47 +0000

Thomas E. Sawyer,

Please see the attached letter dated July 15, 2014 from Thomas Restaino, AT&T.

Thank you, Arlene Jende

Arlene F. Jende Assistant to Tom Restaino Intellectual Property Law AT&T Services, Inc. One AT&T Way, Rm. 3A161A Bedminster, NJ 07921

Fax: 908-532-1219

Email: arlene.jende@att.com

----Original Message----

From: OMT

Sent: Thursday, July 17, 2014 11:24 AM

To: JENDE, ARLENE F (Legal)

Subject: Scan from a Xerox WorkCentre Pro

Please open the attached document. It was scanned and sent to you using a Xerox WorkCentre Pro.

Sent by: Guest [omt@att.com]

Number of Images: 1

Attachment File Type: PDF

WorkCentre Pro Location: BDMNNJ11 3A252A

Device Name: xrx0000aa6f00ca



AT&T Services, Inc. One AT&T Way, Room 3A161 F: 908-532-1219 Bedminster, NJ 07921-0752

thomas.restaino@att.com



July 15, 2014

By email to: tesawyer@tesawyer.com Confirmation by U.S. Mail

Thomas E. Sawyer, Ph.D., Chairman and CEO Voip-Pal.com, Inc. P.O. Box 900788 Sandy, Utah 84090

Re: "Patented Technology for VoIP Networks"

Dear Mr. Sawyer:

This is in response to your recent correspondence with Mr. A. Giesse of AT&T regarding the above referenced matter. I will be handling this matter for AT&T. Accordingly, please direct to me any future communication regarding this matter.

AT&T has a policy of not entertaining or accepting unsolicited offers to analyze, license or purchase third party patents. This policy helps us to avoid misunderstandings and potential disputes. Therefore, we respectfully decline to consider your offer regarding the above referenced matter. In accordance with our policy, I will not distribute your communication to anyone.

We do not interpret your inquiry as an allegation of infringement or misappropriation. However, AT&T is careful to respect the intellectual property rights of third parties. Accordingly, if we misunderstand your intent in this regard please let me know.

We appreciate your interest in our company and are hopeful that you understand our position in this matter.

Very truly yours,

Thomas A. Restaino Chief Intellectual Property Counsel

Thomas A Robin

The following Powerpoint Presentation on Voip-Pal.com Inc's technology and potential applications for AT&T (commencing next page) was sent to Mr. Andy Giesse, AT&T President, sometime prior to June 10, 2014 by Thomas Sawyer, former CEO of Voip-Pal.com Inc.

After receipt of the attached, Mr. Giesse responded that he was sending it to his engineering team for evaluation.

AT&T legal counsel then sent the letter dated July 15 2014 (preceding pages).

### "One World"

Telephony from VoIP-PAL systems



#### One World – Disruptive Telephony

One World is a vision for a world wide disruptive network offering telephony everywhere between all telephone subscribers fixed mobile & WiFi, free to OW subscribers and at local rates regardless of location for all others



#### One World – Disruptive Telephony

- \* It is a cloud Virtual telephone network constructed using the internet and the VoIP PAL systems that enables VoIP to be monetized.
- \* It changes the structures of classic Telephone companies networks and businesses and prepares for the wholesale migration of telephony to all I/P and VoIP telephony.
- \* Opens up he way for new business models



#### One World – Disruptive Telephony

- \* It forges ahead of Apple, Google and Microsoft in their attempts to create world wide single operator networks.
- \* It offers Telco performance and international reach, equivalent the the service available from any legacy Network.
- \* Builds upon new Internet Net Neutrality access Laws



The belief of analysts that "there is no money in VoIP Telephony "– is false.

BUT

The belief that "there is no money" in Peer to Peer VoIP

Telephony – is true



Legacy Networks Monetize by controlling, traffic, access and interconnect.

VoIP-PAL Technology brings control to traffic, access, and interconnect, thereby creating the massive revenues from VoIP



# VoIP is intrinsic to the future of Telephony



#### The VoIP- PAL system

- \*Monetizes VoIP Telephony
- \*Protects the essential aspects of VoIP telephony with
- \*Six fundamental Patents

\* VoIP is intrinsic to the future of Telephony



# The company that owns the VoIP-PAL Patents has the key to controlling VoIP telephony across the world

\*The VoIP- PAL system, Monetizes VoIP Telephony, Protects the essential aspect of VoIP telephony with Six fundamental Patents

\* VoIP is intrinsic to the future of Telephony



# VoIP-PAL the key to new Operator or Web services

\* The company that owns the VoIP-PAL Patents has the key to controlling VoIP telephony across the world

\*The VoIP- PAL system, Monetizes VoIP Telephony, Protects the essential aspect of VoIP telephony with Six fundamental Patents

\* VoIP is intrinsic to the future of Telephony



### The opportunity

Exploit existing Networks or the cloud using the VoIP-Pal system to create new revenue generating telephone or on line Web services.



#### The Network opportunity (1)

- \* Using VoIP-PAL systems implement a Data MVNO based VoIP OTT service using Mobile Fixed or WiFi Networks.
- \* Embed a VoIP App into Smart phones and supply a universal phone number to make and take calls as part of the Local & International Telephone network and own the customer.
- \* A VoIP Mobile Fixed and WiFi service, equivalent to the classic Telco performance and international reach, can be offered.



#### The Network opportunity (2)

- \* Combine VoIP voice with on line Web services platforms for person to person contact in Web transactions.
- \* A VoIP Mobile Fixed and WiFi service, equivalent to the classic Telco performance and international reach, can be offered.
- \* The Un interrupted VoIP PAL system ensures call transition and call handover between wireless networks.
- \* The VoIP-PAL Gateway ensures interconnectivity between classic and Internet systems



#### What does VoIP user expect?

- \* A single phone number to make and receive calls from any universal telephone number.
- \* Telco voice performance equivalence.
- \* Unimpeded transition of active calls between Fixed mobile and WiFi networks.
- \* Support of all the Telco supplementary services, including toll free numbers diverts & premium numbers.
- \* Low cost roaming and international tariffs
- \* 911 Emergency calling services



#### What VoIP Operator needs? (1)

- \* The ability to create a low cost Virtual Telephone Network and monetize the voice services.
- \* Telco service equivalence, including full support of international number system.
- Routing rating, and call record equivalence to facilitate full integration with the International Telco system
- \* Seamless in call transition between Fixed, Wireless and Mobile networks.



#### What a VoIP Operator needs? (2)

- \* Seamless "in-call" transition between Fixed, Wireless and Mobile networks.
- \* Regulatory compliance including Legal Intercept.
- \* Gateway systems to transition VoIP calls across networks irrespective of Telephony Internet or Wireless delivery.



#### VoIP-Pal System features

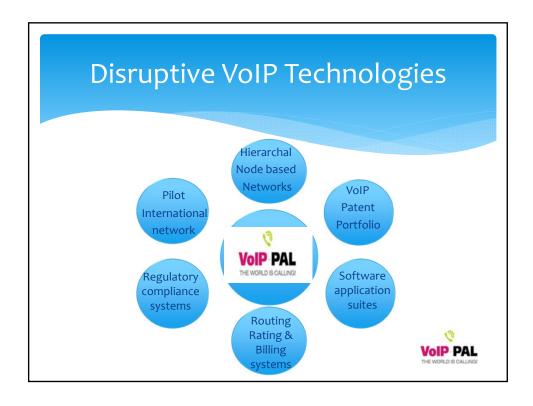
- Leading edge hierarchal server Super Node /Node based architecture
- \* Telephony monetizing features including advanced Routing Rating, and Billing functions and system so that the VoIP service emulates Telco Network interfaces for full service equivalence.
- \* Advanced Legal intercept and 911 emergency calling features
- \* Unique uninterrupted call features for call transition across Fixed, VoIP, Mobile, and WiFi Networks.

#### VoiP PAL

#### VoIP-Pal System features

- Real time assessment of Internet connection performance and in call rerouting to ensure optimum call quality.
- \* Cloud compatible architecture to facilitate implementation of Capex efficient Virtual Internet based networks.
- \* Can be used to build either OTT or embedded VoIP based telephony networks in either fixed or Mobile networks.
- \* VoLTE and CSFB alternative.





\*Disruptive telephony

\*Monetized VoIP services

\*"One World" Virtual networks

\*New Telco business models

\*Universal numbering compatibility

\*Voice services for on line Web systems

\*Legacy Telco network integration

\*All I/P telephony evolution

# Which Top companies would stand to benefit most from monetized VoIP



Top Ten who could benefit from VoIP-PAL

Any Digital services provider or operator who wants or needs to establish and operate a world wide virtual or cloud based revenue earning VoIP telephony system will benefit from VoIP-PAL system.



# Top Companies who could benefit from VoIP-PAL

#### **Social/Search Networks**

\* Google, Yahoo, Facebook/ What's App, AOL, Mums Net

#### **Telco operators**

\* Tata Indicom, Telefonica, SK Telecom, America Movile, Softbank, Blackberry, AT&T, Verizon

#### **Web Services**

\* Ebay, Amazon, Microsoft,

#### **Vendors**

\* Cisco, Nokia, Alcatel



#### Could AT&T benefit from VoIP-PAL?

- AT&T is the largest US Telco network operator and provides the majority of Telephony Data and Internet connectivity across the US.
- It is one of the largest Mobile phone operators in the US
- It does not offer consumer fixed telephony services since the break up of Bell and the creation of autonomous Regional Bell Operating Companies (RBOC's)



#### Could AT&T benefit from VoIP-PAL?

- A One World VoIP Telephony service would allow AT&T to rejoin consumer telephony and operate as a world Telco service across the internet but provide universal access to and from any telephone subscriber.
- It offers the possibility to offer Fixed Mobile and WiFi service packages embedded in the price of Mobile or Fixed phones with local call equivalent long distance and international call rates.



VolP PAL

#### Could AT&T benefit from VoIP-PAL?

- New business and product distribution models are being derived to access international markets for products and services.
- Kindle 3G e- books are fitted with an AT& T SIM for US based users and a Vodafone SIM for UK and European based users.
- Both products provide free International service which is paid for in the product purchase price. It allows products to be distributed directly through on line Web sites such as Amazon for international distribution and to develop an international subscriber base.

#### Could AT&T benefit from VoIP-PAL?

- \* A similar approach for "One World" using VoIP-PAL systems would allow the sale of a Fixed or Mobile phones "on line" which include free "on network" calls throughout the World and Local only call charges for International calls to and from any other subscriber.
- \* Wi fi is central to AT&T's data strategy with a recent partnership with Boingo Wireless for international WiFi roaming.
- VoIP-PAL systems encompass WiFi and include an uninterupted call feature allowing calls to transition between Mobile and WiFi networks.

#### Could AT&T benefit from VoIP-PAL?

- \* The advantage of VoIP-PAL systems is that calls proceed equally regardless of whether I/P or Legacy systems route the calls and WiFI can be used to augment the roaming opportunity by monetizing "WI FI' only media devices.
- \* New regulations including mandatory Local Breakout and Net Neutrality are compromising operators ability to manage their networks.
- \* The VoIP- PAL system provides mechanisms for operators to compete with external Over The Top (OTT) services and provide the means to offer similar services at lower cost and wider reach.

VOIP PAL THE WORLD IS CALLING

VoIP PAL