

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE, INC.,  
*Petitioner*

v.

HBCU MESSAGING US LP,  
*Patent Owner*

IPR2025-01488  
U.S. Patent No. 11,653,182

---

**PATENT OWNER'S PRELIMINARY RESPONSE**

Mail Stop PATENT BOARD  
Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
*Submitted Electronically via P-TACTS*

## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
II.	BACKGROUND .....	1
	A. Technology at Issue .....	1
	B. Challenged Claims .....	4
	C. District Court Case .....	10
III.	CITED REFERENCES.....	11
	A. Horvath (Ex. 1004).....	12
	B. Tsampalis (Ex. 1005).....	18
	C. Kansal (Ex. 1042).....	24
	1. Chatterjee (Ex. 1007) .....	25
IV.	LEVEL OF ORDINARY SKILL IN THE ART.....	26
V.	CLAIM CONSTRUCTION.....	26
VI.	PETITIONER IS UNLIKELY TO PREVAIL WITH RESPECT TO ANY CHALLENGED CLAIM.....	28
	A. Petitioner’s Reliance on “IM” Services Is Unavailing .....	28
	B. The Combination of Horvath-Tsampalis-Chatterjee-Kansal Does Not Disclose at Least Elements 1(d) and 1(h) of Claim 1, and Equivalent Elements from the Other Independent Claims .....	30
	C. Petitioner Cannot Prevail on the Dependent Claims .....	33
VII.	CONCLUSION.....	33

## TABLE OF AUTHORITIES

### Cases

<i>Amgen Inc. v. Hoechst Marion Roussel, Inc.</i> , 314 F.3d 1313 (Fed. Cir. 2003).....	27
<i>Cambridge Mobile Telematics, Inc. v. Sfara, Inc.</i> , IPR2024-00952 (P.T.A.B. Dec. 13, 2024).....	27
<i>Intel Corporation v. Proxense LLC</i> , IPR2025-00327 (P.T.A.B. June 26, 2025).....	10
<i>Medichem, S.A. v. Rolabo, S.L.</i> , 437 F.3d 1157 (Fed. Cir. 2006).....	33
<i>Par Pharm., Inc. v. TWi Pharms., Inc.</i> , 773 F.3d 1186 (Fed. Cir. 2014).....	33

### Regulations

37 C.F.R. § 42.100 (b) .....	26
------------------------------	----

## TABLE OF EXHIBITS

<b>Exhibit</b>	<b>Description</b>
2018	District Court Litigation - Complaint filed by Patent Owner on October 7, 2024 in the Western District of Texas
2019	District Court Litigation - First Amended Complaint filed on January 24, 2025
2020	District Court Litigation - September 24, 2025 Order dismissing Green Dot Corporation without prejudice to replead following initial discovery
2021	District Court Litigation - April 9, 2025 Agreed Scheduling Order
2022	District Court Litigation - Apple's Opening Claim Construction Brief filed on September 22, 2025

## **I. INTRODUCTION**

Petitioner Apple, Inc. (“Petitioner”) filed a Petition for *Inter Partes* Review of claims 1-30 of U.S. Patent No. 11,653,182 (“the ’182 patent”) on August 29, 2025. In addition to the reasons set forth in Patent Owner’s Discretionary Denial Briefing (Paper No. 7), the Petition should be denied on the merits for at least the following reasons.

## **II. BACKGROUND**

### **A. Technology at Issue**

The ’182 patent resulted from the pioneering efforts of Graham Merrett in the field of messaging services, and in particular, the selection of certain services to enhance the operation of messaging systems. The Inventor has multiple patents in this space, and the ’182 patent represents just one example of his innovations.

As explained in the patent specification (Ex. 1001, ’182 patent at 1:50-55), Short Messaging Service (SMS) is a cellular technology for sending and receiving short text messages between mobile users. It was first introduced in the Global System for Mobile Communications (GSM) standards in the 1990s, but was subsequently included in other wireless standards such as Code Division Multiple Access Systems (CDMA).

Although SMS is extremely popular, one of its biggest drawbacks was that an SMS message can only carry a small amount of data, due to limitations imposed

by the Mobile Application Part (MAP) protocol of SS7. Previously, an SMS message could only contain up to 160 8-bit alphanumeric or binary characters and any message longer than 160 characters was usually sent in multiple messages. (Ex. 1001, '182 patent at 1:55-62.)

A Short Messaging Service Center (SMSC) is responsible for handling the delivery of SMS messages in a wireless communications network. An SMS message sent by a mobile user is first delivered to the user's network SMSC before being routed to the recipient. If the recipient's network is operated by a different provider or employs a different wireless standard, the message may pass through more than one SMSC or SMSC gateway before reaching its final destination. Typically, signaling System 7 (SS7) provided the transport mechanism for SMS traffic. (*Id.* at 1:62-2:7),

Several messaging services acted as extensions to SMS. Enhanced Messaging Service (EMS), which uses existing SMS infrastructure, allowed up to 255 SMS messages to be packaged as one EMS message having richer content such as animation, pictures, sounds and formatted text. Multimedia Messaging Service (MMS) messages allowed yet further functionality, and were delivered using a packet data network operating within the cellular system. MMS was first introduced in 2.5 generation networks such as GPRS, which provides an Internet

Protocol (IP) overlay to the existing GSM networks. A multimedia message may contain images, audio clips and videos. (*Id.* at 2:7-20.)

As further described in the patent, another technology, Mobile Instant Messaging (MIM), enabled mobile devices to engage in real-time, instant messaging via an internet protocol data network. Users typically needed to register a user name tag or “handle” with an instant messaging service provider to send and receive messages. Many then-current MIM services also required users to maintain a persistent connection with the Internet during a chat session. (*Id.* at 2:49-3:2.)

The inventions of the '182 patent address multiple gaps in the prior technology, providing a system including that can transmit short message service messages via a cellular network or alternatively packet switched messages via a packet switched message service (PSMS) that operates outside the cellular core network. The system includes a server or collection of servers that support the PSMS and may also maintain status information and queue messages for delivery as needed. (*Id.* at 4:49-54; 6:10-32; 10:10-18.)

In practice, the sending mobile phone sends a request to a server residing outside the cellular core network, querying whether the recipient device address corresponds to a subscriber address. If so, the sending mobile phone sends the message via the PSMS. If not, the sending mobile phone sends the message via

SMS. (*Id.* at 11:36-12:18.) The '182 patent also departed from conventional MIM systems by doing away with the requirement that an instant messaging user register a user nametag or handle for purposes of identifying the user to the system.

Instead, the '182 patent teaches that the user's mobile phone number be utilized as the user's identifier:

The destination address may be a mobile phone number or a numeric "shortcode" or alias representing one or more, or a combination of, phone numbers, email addresses, instant messaging user handles and IP addresses. Therefore, for all users of the messaging service, and unlike conventional MIM clients, the invention utilizes a user's mobile phone number as the identifier of the user, and does not require the user to register a user name, tag or handle, thus providing a single number for message sending.

(*Id.* at 3:40-47.)

The patent also addresses situations in which the recipient mobile phone is not connected to the server when the packet switched message is sent. In that situation, the '182 patent teaches that message may be queued by the server until the recipient device connects to the server. (*Id.* at 4:16-22.) Messages received over both of the SMS system and the PSMS system are displayed by the same messaging application. (*Id.* at 9:24-36.)

## **B. Challenged Claims**

Petitioner challenges claims 1-30 of the patent, including independent claims 1, 17, 22, and 25. As set forth below, given that the asserted prior art fails to

disclose every element of the independent claims, the Petitioner's arguments with regard to the dependent claims must also be rejected.

Claim 1 is directed to system and is reproduced below:

1.pre	A system comprising:
1.a	a sending mobile phone that transmits short message service (SMS) messages via a cellular network and packet switched messages via a packet switched message service (PSMS); and
1.b	at least one server that supports the PSMS and maintains status information;
1.c	wherein: the sending mobile phone retrieves a destination address of a first message from the first message, wherein the destination address of the first message is a phone number of a first receiving mobile phone;
1.d	the sending mobile phone sends first information representing the phone number of the first receiving mobile phone to the at least one server;
1.e	the sending mobile phone sends second information representing the phone number of the second receiving mobile phone to the at least one server;
1.f	the at least one server, in response to receipt of the first information, sends a first response to the sending mobile phone when the phone number of the first receiving mobile phone is not identified as a subscriber of the PSMS;
1.g	after the first response is received by the sending mobile phone, the sending mobile phone sends the first message as an SMS message to the first receiving mobile phone;
1.h	the sending mobile phone retrieves a destination address of a second message from the second message, wherein the destination address of the second message is a phone number of a second receiving mobile phone;
1.i	the sending mobile phone sends second information representing the phone number of the second receiving mobile phone to the at least one server;
1.j	the at least one server, in response to receipt of the second information and conditioned on the phone number of the second receiving mobile

	phone being identified as a subscriber of the PSMS and the second receiving mobile phone having an active status with the PSMS, sends a second response to the sending mobile phone;
1.k	after the second response is received by the sending mobile phone, the sending mobile phone sends the second message as a packet switched message, via a wireless local area network (WLAN) and the PSMS, to the second receiving mobile phone, wherein at the time the packet switched message is sent, the second receiving mobile phone is not connected to the at least one server, wherein the packet switched message is queued until the second receiving mobile phone connects to the at least one server;
1.1	the PSMS is a service for sending and receiving packet switched messages other than SMS, enhanced message service (EMS) and multimedia message service (MMS) messages; and content of the SMS message and content of the packet switched message is displayed by a same messaging client

Independent claims 17, 22, and 25 are directed to methods of transmitting messages. Claims 17, 22, and 25 are reproduced below:

17.pre	A method performed by a sending mobile phone that transmits short message service (SMS) messages via a cellular network and packet switched messages via a packet switched message service (PSMS), the method comprising:
17.a	authenticating a phone number of the sending mobile phone with the PSMS;
17.b	sending first information representing a phone number of a first receiving mobile phone to a server of the PSMS;
17.c	receiving a first response when the phone number of the first receiving mobile phone is not identified as a subscriber of the PSMS;
17.d	sending, after the first response is received by the sending mobile phone, an SMS message to the first receiving mobile phone;
17.e	sending second information representing a phone number of a second receiving mobile phone to the server;
17.f	receiving a second response, when the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS and when the second receiving mobile phone has an active status with the PSMS; and

17.g	sending a message, after the second response is received by the sending mobile phone, via a wireless local area network (WLAN) and the PSMS, to the second receiving mobile phone;
17.h	wherein the second response communicates different information than the first response;
17.i	wherein the PSMS is a service for sending and receiving packet switched messages other than SMS, enhanced message service (EMS) and multimedia message service (MMS) messages;
17.j	wherein the SMS message sent to the first receiving mobile phone and the message sent to the second receiving mobile phone are originated via a same messaging client.

22.pre	A method performed by a sending mobile phone that transmits short message service (SMS) messages via a cellular network and packet switched messages via a packet switched message service (PSMS), the method comprising:
22.a	authenticating a phone number of the sending mobile phone with the PSMS; sending first information representing a phone number of a first receiving mobile phone to a server of the PSMS; receiving a first response when the phone number of the first receiving mobile phone is not identified as a subscriber of the PSMS;
22.b	sending, after the first response is received by the sending mobile phone, an SMS message to the first receiving mobile phone;
22.c	sending second information representing a phone number of a second receiving mobile phone to the server;
22.d	receiving a second response, when the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS and when the second receiving mobile phone has an active status with the PSMS;
22.e	sending a message, after the second response is received by the sending mobile phone, via a wireless local area network (WLAN) and the PSMS, to the second receiving mobile phone;

22.f	sending third information representing the phone number of the second receiving mobile phone to the server;
22.g	receiving a third response, when the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS and when the second receiving mobile phone does not have an active status with the PSMS; and
22.h	sending, after the third response is received by the sending mobile phone, an SMS message to the second receiving mobile phone;
22.i	wherein the second response communicates different information than the third response; and
22.j	wherein content of the SMS message sent to the first receiving mobile phone, content of the message sent via the WLAN and the PSMS to the second receiving mobile phone and content of the SMS message sent to the second receiving mobile phone is displayed by a same messaging application client;
22.k	wherein the PSMS routes at least some messages between PSMS subscribers according to an email address.

25.pre	A method performed by a sending mobile phone that transmits short message service (SMS) messages via a cellular network and packet switched messages via a packet switched message service (PSMS), the method comprising:
25.a	retrieving, by a messaging client, a destination address of a first message from the first message, wherein the destination address of the first message represents a phone number of a first receiving mobile phone;
25.b	sending first information representing the phone number of the first receiving mobile phone to a server of the PSMS;
25.c	receiving a first response when the phone number of the first receiving mobile phone is not identified as a subscriber of the PSMS;

25.d	sending, after the first response is received by the sending mobile phone, the first message as an SMS message to the first receiving mobile phone;
25.e	retrieving, by the messaging client, a destination address of a second message from the second message, wherein the destination address of the second message is a phone number of a second receiving mobile phone;
25.f	sending second information representing the phone number of the second receiving mobile phone to the server;
25.g	receiving a second response, when the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS and when the second receiving mobile phone has an active status with the PSMS;
25.h	sending the second message, after the second response is received by the sending mobile phone, via a wireless local area network (WLAN) and the PSMS, to the second receiving mobile phone;
25.i	sending third information representing the phone number of the second receiving mobile phone to the server;
25.j	receiving a third response, when the phone number of the second receiving mobile phone is identified as a subscriber of the PSMS and when the second receiving mobile phone does not have an active status with the PSMS; and
25.k	sending, after the third response is received by the sending mobile phone, an SMS message to the second receiving mobile phone;
25.l	wherein the second response communicates different information than the third response
25.m	wherein content of the SMS message sent to the first receiving mobile phone, content of the second message and content of thqee SMS message sent to the second receiving mobile phone is displayed by a same messaging client.

### C. District Court Case

Patent Owner filed a Complaint (Ex. 2018, District Court Case, Dkt. 1) against Petitioner Apple on Oct. 07, 2024, in the Western District of Texas, and a First Amended Complaint (“FAC”) (Ex. 2019, District Court Case, Dkt. 32) on Jan. 24, 2025. The Complaint and FAC were originally filed against Apple, Inc. and Green Dot Corporation, but the Court dismissed Green Dot Corporation without prejudice to replead following initial discovery. (Ex. 2020, District Court Case, Dkt. 63.)

The District Court litigation has progressed steadily. In keeping with the Scheduling Order, the parties have served preliminary contentions and fully briefed claim construction. (Ex. 2021, District Court Case, Dkt. 49.) The claim construction hearing is scheduled for January 20, 2026. (*Id.* at 2-3.) This case already has a date set for jury trial. (*Id.* at 4.)<sup>1</sup>

---

<sup>1</sup> Although a date is set here, having a date certain for a trial is not even a necessary prerequisite for discretionary denial. *See, e.g., Intel Corporation v. Proxense LLC*, IPR2025-00327, Paper 12 at 2 (P.T.A.B. June 26, 2025) (Petitions discretionarily denied due to settled expectations though no trial date scheduled).

### III. CITED REFERENCES

Petitioner cobbles together a four-reference combination to assert against each of the challenged claims. In doing so, Petitioner manufactures what it names as the “Horvath-Tsampalis-Chatterjee-Kansal combination,” and treats that as a single “reference”—something that Petitioner then speaks of as if it actually exists and can be measured against the claims.

This attempted usage disguises the numerous instances in which Petitioner simply fills in details where *the references themselves contain insufficient disclosure*.<sup>2</sup> These are revealed by the Petition’s many resorts to asserting what would have been “obvious” even in light of the full four-reference combination, rather than disclosed within the collective combination itself. (*See, e.g.*, Pet. at 56, (“It was obvious to configure the sending mobile phone in the Horvath-Tsampalis-Chatterjee-Kansal combination to determine whether a receiving phone has an active status . . . .”); *see also* Pet. at 34, 38, 42, 45, 46, 48, 51, 55, 57-60, 64-66, 71, and 80-83 (paragraphs beginning with “It was obvious that . . . .”).)

In reality, none of the prior art references cited by Petitioner, either alone or in combination, teach all the elements of any independent claim, and thus Petitioner’s arguments fail at the outset. Each reference is summarized briefly below.

---

<sup>2</sup> Unless otherwise indicated, emphasis in this paper has been added

**A. Horvath (Ex. 1004)**

Petitioner cites Horvath, Ex. 1004. As explained in Patent Owner's Discretionary Denial Brief, Horvath is cumulative with multiple references that were cited in original prosecution. (Paper No. 7 at 3.) For at least the same reasons that the claims were originally allowed, as well as at least the reasons set forth below, Horvath, alone or in combination with the other cited references, does not teach or suggest the claimed subject matter of the '182 patent.

Petitioners concede that Horvath focuses on SMS messages only. "Horvath focuses on the selective use of packet switched or circuit switched bearers for delivery of SMS messages." (Pet. at 8.) As such, Horvath is concerned with messaging that is sent by way of a cellular network, not outside the cellular network.

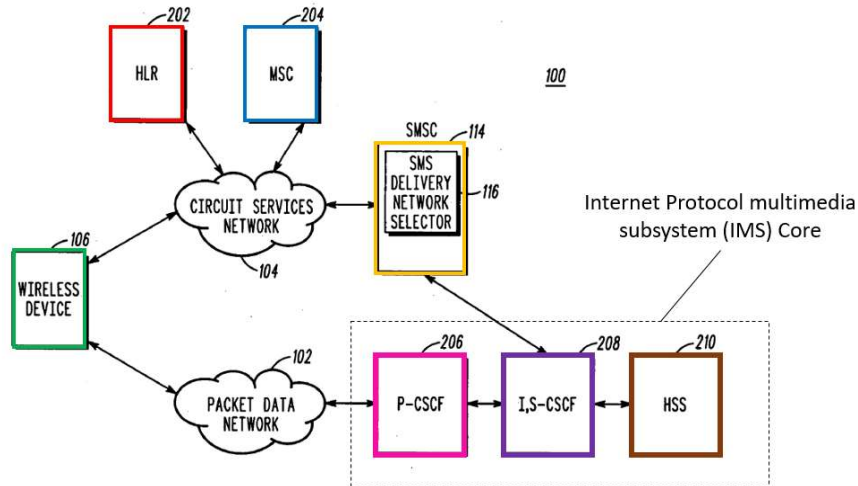
Horvath identifies a problem associated with the conventional transmission of SMS messages, which is that SMS traffic was traditionally transmitted in the same circuit switched networks used by cellular providers to carrying voice traffic:

One problem with the traditional way of transmitting SMS messages discussed above is that the circuit services network is primarily used for voice services. The circuit services network is unnecessarily burdened with SMS traffic. Network resources such as air interface capacity and MSC capacity, among other things, are decreased.

(Ex. 1004 at [0004].)

Horvath explains that, in order to overcome this problem, some cellular providers utilize a packet data network (as opposed to a circuit services network) for transmission of SMS messages. (Ex. 1004, [0004].) However, this solution still burdened the overhead of the traditional cellular network because the Short Message Service Center (SMSC) did not know whether the intended recipient device was registered to receive messages over a packet data network. (*Id.*) As a result, the SMSC (operating within the traditional cellular network) still “needs to query a home subscriber server (‘HSS’) to determine the registration status of the recipient device. This process creates unnecessary overhead for the system.” (*Id.*)

Figure 2 of Horvath (reproduced produced below with added color annotations) illustrates Horvath’s proposed solution, in which a sending wireless device 106 (dark green box) is coupled to the packet data network 102 and the circuit services network 104. (Ex. 1004, [0034].) A home location register (“HLR”) 202 (red box) that helps route calls and SMS messages is also coupled to the circuit services network 104. The HLR is a database that holds subscription information associated with wireless devices subscribing in the circuit services network. (*Id.*, [0002].) A mobile switching center (“MSC”) 204 (blue box) that manages communications between the wireless device 106 and the public switched telephone network (“PSTN”), is also coupled to the circuit services network. (*Id.*, [0031]-[0032].)



In the Horvath framework, the SMSC 114 (orange box) is directly coupled to the circuit services network 104, and also indirectly coupled to the packet data network 102 via a proxy call session control function (“P-CSCF”) 206 (pink box), an interrogating/serving call session control function (“I,S-CSCF”) 208 (purple box) and a registrar such as a home subscriber server (“HSS”) (brown box). (Ex. 1004, [0033].) The P-CSCF 206, I,S-CSCF 208, and HSS 210 together “comprise part of an Internet Protocol multimedia subsystem (‘IMS’) core” (black dotted line box)<sup>3</sup> that supports a session internet protocol (“SIP”) network “used for establishing instant messaging, telephone calls, and other real time communications over the Internet.” (*Id.*, [0033]-[0034].)

To send and receive SMS messages via the packet data network 102 in Horvath, the wireless device 106 registers with the S-CSCF component of the I,S-

<sup>3</sup> Dotted line in the original.

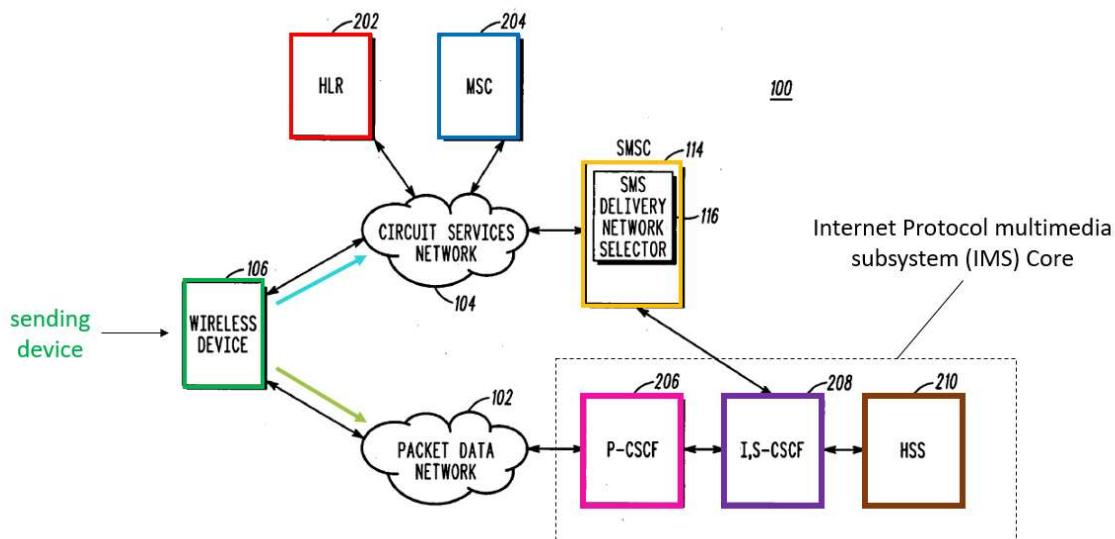
CSCF 208, “When the S-CSCF receives a registration request from the wireless device 106, the S-CSCF contacts the HSS 210 for authentication and authorization of the wireless device 106. Upon being authenticated by the S-CSCF, a security association between the wireless device 106 and the P-CSCF . . . is established.” (Ex. 1004, [0040].)

Within the IMS core, the HSS 210 maintains a database with a profile (e.g., the telephone number) of each wireless device 106 registered with the IMS core. In addition, the “S-CSCF notifies the SMSC 114 that the wireless device 106 has registered,” and “also transmits SIP contact information associated with the wireless device” so that the SMSC 114 can deliver a SMS message to the wireless device 106 over the packet data network 102. (Ex. 1004, [0040].)

In this manner, each wireless device registered with the IMS core can send and receive SMS messages through the packet data network 102. (Ex. 1004, [0040], [0044], [0053].) By contrast, each wireless device not registered with the IMS core can only send and receive SMS messages through the circuit services network 104. (*Id.*, [0047], [0050].) Through use of the IMS-based network, Horvath moves some SMS messaging traffic off the circuit network 104 and onto the IMS-based data network (packet data network 102), thereby providing capacity relief on the circuit services network 104 without unduly burdening the SMSC. (Ex. 1004, [0039].)

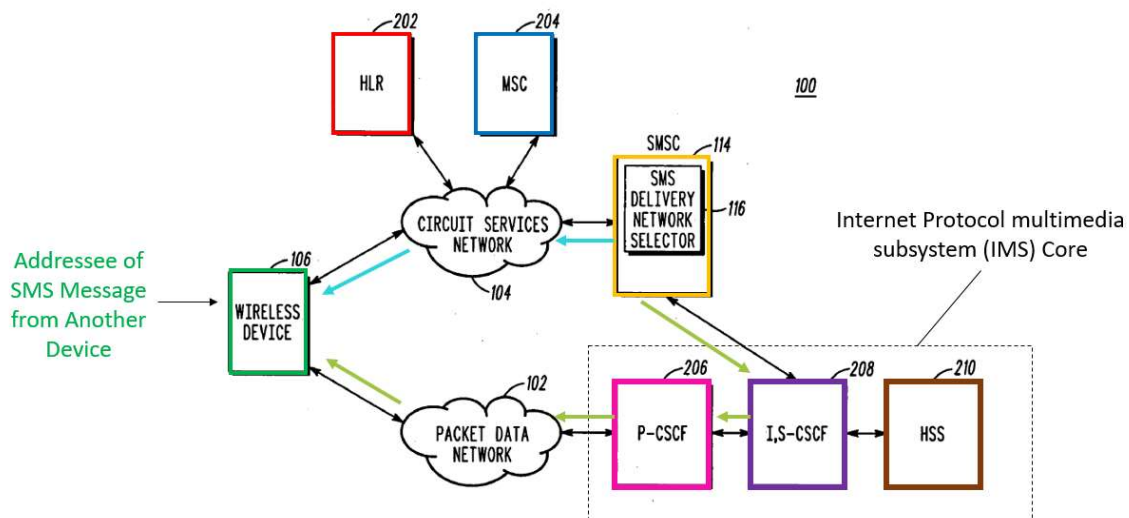
The operation of Horvath is set forth in the reproduction of Horvath's Figure 2 below, also annotated in color for convenience. When the wireless device 106 desires to send an SMS message to another device, device 106 decides whether to send the SMS message via the circuit service network 104 or packet data network 102 by determining if the sending wireless device itself is registered on the packet data network 102.

If the wireless device 106 is registered on the packet data network 102, the wireless device 106 sends the message as a SIP message over the packet data network 102 (over the path is illustrated by the olive green arrow) to HSS 210, which forwards the message to the SMSC 114. If the wireless device 106, is not registered on the packet data network 102, the wireless device 106 transmits the SMS message to SMSC 114 over the traditional circuit services network 104 (over the path illustrated with the turquoise arrow). (Ex. 1004 at [0050].)



Significantly, the sending wireless device 106 decides which network to use based on the capabilities of the sender's device. (See Ex. 1004 at [0050], Fig. 2.) This aspect of Horvath stands in contrast with claim 1 of the '182 patent, where the sending mobile phone selects a transmission mode based on a response to a server query regarding (generally) whether the recipient device is also registered with the same external packet switched messaging system.

Horvath uses 106 to identify both the sending and receiving devices which further indicates the same pathway is followed. In Horvath, upon receiving the SMS message from the sending wireless device 106, the SMSC 114 determines whether to deliver the message to wireless the network using the circuit service network 104 (this path is illustrated with the **turquoise** arrows) or the packet data network 102 (this path is illustrated by the **olive green** arrows).



“[W]hen a SMS message request is received by the SMSC 114, the SMSC 114 first determines if the recipient wireless device 106 is registered on the packet data network 102 . . . . If the SMSC 114 determines that the recipient device is registered on the packet data network 102, the SMSC 114 delivers the SMS message to the recipient device through the packet data network 102 via the IMS.” (Ex. 1004, [0044].) That path is illustrated by the **olive green** arrows. Conversely, “[i]f the recipient device is not registered on the packet data network 102, the SMSC 114 delivers the SMS message to the recipient device through the traditional circuit services network [104].” (Ex. 1004, [0047], [0076].) That path is illustrated by the **turquoise** arrows.

Petitioner asserts that, once the message is sent from the sending wireless device to the SMSC, “SMSC 114 includes an ‘SMS delivery network selector 116’ that ‘selects either the packet data network 102 or the circuit services network 104 for delivery of a SMS message’ based on whether the intended recipient of the message is currently registered on the packet data network 102.” (Pet. at 9-10.) This aspect of Horvath stands in contrast with claim 1 of the ’182 patent, where the entity that selects a transmission mode is outside the cellular core network, as set forth within the claims (since the query and response “do not traverse the cellular core network”).

**B. Tsampalis (Ex. 1005)**

Petitioner also cites Tsampalis, Ex. 1005. Notably, the PCT application leading to Tsampalis, WO 2004/061583 (“Tsampalis PCT”), was in the record during prosecution of the ’182 patent and accordingly appears on the face of the ’182 patent. A comparison of the Tsampalis PCT with Tsampalis references asserted here demonstrates that they are substantively identical. (Ex. 1005, Tsampalis reference; Ex. 2009 Tsampalis PCT reference.) Unsurprisingly, Petitioner identifies no material differences between the references. Likewise, unsurprisingly, Tsampalis fails, either alone or in combination with the other cited references, to teach or suggest the claimed subject matter of the ’182 patent.

At the time of Tsampalis, cellular networks were known to support both the Short Messaging Service (SMS) as well the more recently introduced Multi-Media Service (MMS). (Ex. 1005, [0002]-[0003].) However, such networks often included mobile messaging devices that were “compatible with only a subset of the supported concurrent multiple mobile messaging systems.” (*Id.*, [0003].)

Such networks permitted a mobile device with MMS messaging capability to send an MMS message to a receiving mobile device capable of only receiving SMS messages (but not MMS messages). (*Id.*) On the other hand, if an MMS-capable device sent an MMS message to a device capable of only processing SMS messages, the messages could be bounced back to the sender. “Being unable to process the message due to the incompatibility of its messaging service capabilities

with that of the format of the received message, the receiving mobile messaging device then typically bounces the message back to the sending mobile messaging device,” which was undesirable. (*Id.*)

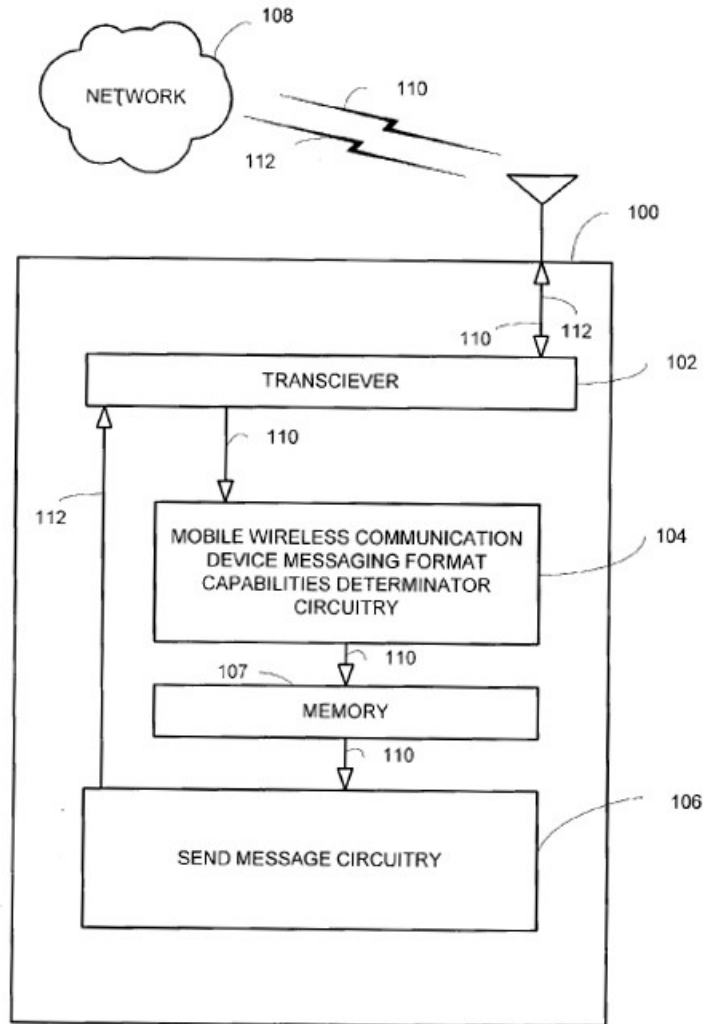
To resolve this problem, before sending a message (e.g., an MMS message) to a recipient device, the sender obtains the recipient devices capabilities *from that recipient device*:

In one embodiment, such devices are also capable of obtaining messaging format capabilities information from a target or recipient mobile wireless communication device, that reflect which types of non-real-time store-and-forward messaging formats a mobile wireless communication device is capable of processing. Such devices, using the messaging format capabilities information, then send[s] a message to a target mobile wireless communication device in a format that can be processed by the target mobile wireless communication device.

(Ex. 1005, [0022].)

Tsampalis is primarily directed to cellular messaging formats, namely SMS, EMS and MMS. As explained in the reference, Figure 1 of Tsampalis depicts the components of a “cellular telephone, two-way pager, or other device employing non-real-time store-and-forward messaging (e.g., SMS, EMS, MMS messaging).” The mobile device 100 contains a transceiver 102, mobile wireless communication device messaging format capabilities determinator circuitry 104, send messaging circuitry 106 and memory 107.” (Ex. 1005, [0024].) The “first mobile wireless

communication device 100 is further connected to network 108,” e.g., a mobile cellular telephone network. (*Id.*)



The sending mobile device requests the second device’s messaging capabilities from the second device itself. “In operation, the mobile wireless communication device messaging format capabilities determinator circuitry 104 communicates through the transceiver 102 to the network 108 to

obtain second mobile wireless communication device messaging format capabilities information 110.” (Ex. 1005, [0025].)

In turn, the second device returns that requested information to the sending device. “The second mobile wireless communication device messaging format capabilities information 110 is received back from the network 108 through the transceiver 102 to the mobile wireless communication device messaging format capabilities determinator circuitry 104.” (*Id.*)

The sending device then uses that information to send the message in one of the formats within the capability of the second device. “The send message circuitry 106 operates to send a message in a message format compatible with at least one of the formats identified in the second mobile wireless communication device messaging format capabilities information 110.” (*Id.*)

Figure 2 shows the devices themselves in greater detail and confirms this overall communication flow. “After the first mobile wireless communication device 100 sends the second mobile wireless communication device messaging format capabilities information request 226, the second mobile wireless communication device 200’s remote messaging format capabilities determinator circuitry 208 receives the second mobile wireless communication device messaging format capabilities information request 226.” (Ex. 1005, [0035].) “The second mobile wireless communication device 200 retrieves and

sends the second mobile wireless communication device messaging format capabilities information 110 to the first mobile wireless communication device 100 in response to the information request 226 containing the second mobile wireless communication device messaging format capabilities information 110.” (*Id.*)

In another embodiment, a database local to the sending phone in the first mobile device 100 (i.e., a phonebook) is used to determine the capabilities of the second mobile device. “Here, a local database is examined to see if the messaging capabilities of the second mobile wireless device are stored locally.” (Ex. 1005, [0047].)

Of course, it might be that the second device is not located within the local database. “[T]he method includes the operation of determining whether the second mobile wireless communication device 200 is not found in the local database (e.g., phonebook 222).” (*Id.*) If the second device is not in the database, the sending phone queries the second phone directly as described above. “When the second mobile wireless communication device 200 is not found, . . . the method, as illustrated in block 1106, generates and sends a second mobile wireless communication device messaging format capabilities request 226 to the second mobile wireless communication device 200.” (*Id.*) “[T]he method includes the sending of a second mobile wireless communication device messaging format

capabilities list from the second mobile wireless communication device 110 based on the second mobile wireless communication device messaging format capabilities request 226.” (Ex. 1005, [0048].)

On embodiment of Tsampalis involves querying the Home Location Register regarding the second device’s capabilities. In this embodiment, “while inputting the active message 216, the first mobile wireless communication device 100 will transparently contact the network talking to the address(es), (e.g., the MSISDN(s)), of the recipients(s), and try to talk with their home location register (HLR) to find out if they are capable of receiving an MMS message.” (Ex. 1005, [0061].) The sending device then sends its message according to the information received from the HLR. (*Id.*)

**C. Kansal (Ex. 1042)**

Petitioner cites Kansal, EX1042 which is U.S. Pub. No. US 2008/0153459. Kansal discloses enhanced mobile messaging services. (Ex. 1042, Kansal, at Abstract.) The wireless device may receive different message types and utilizes “a threading engine to determine a sender of a received message and/or a recipient of a sent message.” (*Id.* at [0009].) The threading machine “correlate[s] received messages of different message types with a particular sender and sent messages of different types with a particular recipient.” (*Id.*) It then displays on the wireless

device a messaging thread comprising correlated messages of different message types. (*Id.*)

Kansal does not disclose each of the limitations of the claimed subject matter of the '182 patent. For that reason alone, Kansal alone does not teach or suggest the claimed subject matter of the '182 patent. Likewise, as explained below, in combination with the other cited references, Kansal does not teach or suggest the claimed subject matter of the '182 patent.

**1. Chatterjee (Ex. 1007)**

Petitioner cites Chatterjee, EX1007, as a brief history of the development of instant messaging and presence until its publication in 2005. (Pet. at 17.) Specifically, Chatterjee states that “[p]resence provides information about a users’ reachability and willingness accept/reject a brief chat session.” (Ex. 1007, Chatterjee at 1.) In addition, Chatterjee provides a table of instant messaging systems available as of the reference’s publication.

Chatterjee does not explicitly disclose any of the claim limitation, but is used in combination with the other prior art references to show that “it was obvious. . .” to identify the claim limitation. (*See e.g.*, Pet. at 55.) Thus, for at least these reasons, and those reasons below, Chatterjee alone does not teach or suggest any of the claimed subject matter of the '182 patent. Moreover, as explained below, in

combination with the other cited references, Chatterjee does not teach or suggest the claimed subject matter of the '182 patent.

#### **IV. LEVEL OF ORDINARY SKILL IN THE ART**

While Patent Owner generally agrees with the Petitioner's definition of a person of ordinary skill in the art ("POSITA"), Patent Owner finds that it ignores the knowledge gained from anything other than formal education.

Thus, Patent Owner adopts Petitioner's definition of a POSITA with one addition set forth in italics:

A person of ordinary skill in the art relating to the subject matter of the '182 patent as of the critical date ("POSITA") would have had at least a bachelor's degree in computer science, electrical engineering, computer engineering, or a related field, with 2-3 years of industry experience in computer networking and wireless telecommunications. *A formal university degree may be substituted by equivalent practical experience and education in the field.*

#### **V. CLAIM CONSTRUCTION**

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).

The Petition alleges that no claim term requires construction. (Pet. at 5.) This conflicts, however, with Petitioner's contentions in the parallel district court litigation, in which Petitioner identified multiple terms, including terms from the '127 patent, that it asserts require construction. (Ex. 2022, District Court Litigation Dkt. 62 at 3, 10.)

Petitioner's contradictory positions threaten inconsistent results, potentially because Petitioner may assert (expressly or impliedly) broader constructions to argue invalidity with the Board while advocating narrower constructions to support non-infringement positions in district court. This approach is plainly improper. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003) ("It is axiomatic that claims are construed the same way for both invalidity and infringement.") Petitioner's gamesmanship should not be rewarded, especially where as here, Petitioner gave the Board no notice that the District Court will soon be addressing a number of these same claim terms.

In fact, the Board has previously found that such actions run afoul of 37 C.F.R. §42.104(b)(3) because Petitioner failed to explicitly explain its construction positions or adequately justify its contradictory claim construction positions. *See, e.g., Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 (P.T.A.B. Dec. 13, 2024) (informative) (denial under §42.104(b)(3) for using

contradictory constructions in Petitioner and District Court regarding means-plus-function claims). The Board should deny the Petition here for the same reasons.

For purposes of this Preliminary Response only, Patent Owner merely addresses the arguments as presented by Petitioner. However, multiple claims are currently being considered and construed by the District Court. Patent Owner reserves the right to propose constructions of the claims should *inter partes* review be instituted.

## **VI. PETITIONER IS UNLIKELY TO PREVAIL WITH RESPECT TO ANY CHALLENGED CLAIM**

For each claim, Petitioner has identified a single Ground for alleged invalidity, namely the “Horvath-Tsampalis-Chatterjee-Kansal combination. In fact, no combination of these references discloses all the elements of any claim, and the Petition should be denied.

### **A. Petitioner’s Reliance on “IM” Services Is Unavailing**

Throughout the Petition, the Petitioner attempts to equate aspects of the ’182 patent invention to instant messaging services. For instance, after summarizing Horvath and Tsampalis (and their combination) and recognizing various shortcomings, Petitioner introduces Chatterjee and its description of “IM&P” (instant messaging and presence) technology. Thereafter, this shorthand of “IM” is utilized throughout the Petition to reference various purported capabilities of

“instant messaging” systems. These systems are then referenced throughout to purportedly meet certain features of the patent claims.

But the '182 patent specification discusses instant messaging systems of the time (which it refers to as Mobile Instant Messaging (MIM) systems) and describes their deficiencies. These same deficiencies are also present in Petitioner's own references.

For example, many IM services required users to maintain a persistent connection with the Internet during a chat session. (Ex. 1001, '182 patent at 2:19-27.) In this same prior art vein, Chatterjee tracks whether users are “active” and thus whether they can receive messages—the exact opposite of the '182 patent invention. (Ex. 1007 at [0001], [0006].)

Likewise, the '182 patent departed from conventional IM systems by doing away with the requirement of registering a username or handle. (Ex 1001, '182 patent at 3:40-47.) In contrast, Petitioner's reference Kansal stresses the integral use of “IM screen names” for users, even while discussing an individual phone's standard “contacts” database:

The mobile computing device 100 also may comprise a contacts database 142. The contacts database 142 may be arranged to store contact records for individuals or entities specified by the user of the mobile computing device 100. The contact record for an individual may comprise identifying information such as first name, last name,

company/employer name, mailing addresses (e.g., home, work, other), telephone numbers (e.g., home, work, mobile, fax, pager), e-mail address (e.g., home, work, primary, alternative), *IM screen names*, SMS identifier, MMS identifier, personal information, notes, and so forth.

(Ex. 1007 at [0037].)

Even worse, the Petition employs an apparently deliberate sleight of hand with respect to Horvath. Petitioner implies that Horvath contemplates an Instant Message service within its system based on Horvath's use of the acronym "IMS." But in Horvath, the acronym "IMS" stands for "Internet Protocol multimedia subsystem," *not* Instant Message. (See Ex. 1004, Horvath at [0034].)

Nevertheless, the Petitioner utilizes the acronym without explanation:

While SMS, MMS, and EMS feature prominently in Horvath and Tsampalis, a POSITA would have appreciated that additional services were also commonly used for messaging on wireless devices by the Critical Date. APPLE-1003, ¶51. *For example, Horvath notes that its "IMS system also includes application servers that host and execute services for the wireless device 106,"* where the services can include "SMS, MMS, caller ID, call waiting, push-to-talk, voicemail, and the like."

(Pet. at 18-19.)

**B. The Combination of Horvath-Tsampalis-Chatterjee-Kansal Does Not Disclose at Least Elements 1(d) and 1(h) of Claim 1, and Equivalent Elements from the Other Independent Claims**

The Petition fails to show the presence of at least element 1(d) (“the sending mobile phone sends first information representing the phone number of the first receiving mobile phone to the at least one server”) and 1(h) (“the sending mobile phone sends second information representing the phone number of the second receiving mobile phone to the at least one server”) of claim 1, as well as like elements from the other independent claims (17(b) and 17(e), 22(a) and 22(d), and 25(b) and 25(f)).

This is apparent from the beginning, in which Petitioner points to no reference that actually discloses these elements—in particular that the sending phone sends to a server information *representative of the phone number of the second phone*—but instead asserts that the imaginary “sending mobile phone” in its four-reference combination merely “determines whether the destination address corresponds to a subscriber of the IM service through the remote server system supporting IM.” (Pet. at 43.)

Immediately thereafter the Petition effectively concedes that the element of sending information “representative of the phone number” of the recipient phone is missing entirely. Specifically, Petitioner asserts not that these elements are actually disclosed in any reference; only that it would have been *obvious* to “determine whether the destination address corresponds to a subscriber of an IM service by sending a request to the remote server system and receiving a response

from the server system indicating the same.” (*Id.* at 43.) But even this rumination as to what would have been “obvious” fails to match the requirement of sending information “representative of the phone number” (because nothing in the quoted language of what would supposedly be obvious *actually says* sending information “representative of the phone number”). Thus, even when stretching the four-reference combination beyond what is actually disclosed, Petitioner fails to address the requirements of the claims.

Indeed, nothing within the entire Petition subsection addressing element 1(d) of claim 1 addresses the actual claim language. The subsequent text of the second paragraph describes how Tsampalis describes sending “a request” and receives information back. (*Id.* at 43-44.) The third paragraph describes what can be maintained in a Horvath database, but not *sending* information “representative of the phone number.” (*Id.* at 44.) The final paragraph of the subsection, beginning with the word “Thus,” merely asserts that a message “including the phone number” is sent—with zero citation to the actual references (only to Petitioner’s expert). This conclusion is asserted even though Petitioner never actually demonstrated in the paragraphs above that information “representative of the phone number” is sent in any cited reference. (*Id.* at 44.)

The same holds for element 1(h) of the claims, which relates to a second message to the same server. Here the Petition simply points to the deficient

analysis for element 1(d). (Pet. at 53.) The Petition, likewise, fails on the other independent claims, which recite similar requirements. (See elements 17(b) and 17(e), 22(a) and 22(d), and 25(b) and 25(f).)

Accordingly, the Petition entirely fails to demonstrate the presence of multiple elements of each independent claim, and thus, no obviousness combination can be found. See, e.g., *Par Pharm., Inc. v. TWi Pharms., Inc.*, 773 F.3d 1186, 1194 (Fed. Cir. 2014) (need to “prove that all claimed limitations are disclosed in the prior art.”); *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1164 (Fed. Cir. 2006) (stating that we consider motivation to combine and reasonable expectation of success only “if all the elements of an invention are found in a combination of prior art references”).)

### **C. Petitioner Cannot Prevail on the Dependent Claims**

Horvath, Tsampalis, Chatterjee and Kansal, alone or in combination, do not render any of the independent claims of the '182 patent unpatentable. Since each of the dependent claims includes all of the limitations of one independent claim, the combination of the four references, likewise, does not render any dependent claim of the '182 patent unpatentable.

## **VII. CONCLUSION**

Pursuant to 35 U.S.C. § 314, Patent Owner respectfully requests that the Board refuse to institute *inter partes* review for the reasons stated herein.

Dated: December 9, 2025

Respectfully submitted,

/s/Timothy Devlin

Timothy Devlin, Reg. No. 41,706

DEVLIN LAW FIRM LLC

1526 Gilpin Avenue

Wilmington, DE 19806

Tel: (302) 449-9010

Fax: (302) 353-4251

tdevlin@devlinlawfirm.com

*Attorney for Patent Owner*

*HBCU Messaging US LP*

## **CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS**

This Patent Owner's Preliminary Response consists of 7,194 words, excluding cover page, table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The brief complies with the type-volume limitation of 14,000 words as mandated in 37 C.F.R. §42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

/ Timothy Devlin /  
Timothy Devlin

**CERTIFICATE OF SERVICE**

I hereby certify that on December 9, 2025, I caused a true and correct copy of **PATENT OWNER'S PRELIMINARY RESPONSE** to be served via electronic mail on the following counsel for Petitioner:

<b>LEAD COUNSEL</b>	<b>BACKUP COUNSEL</b>
W. Karl Renner, Reg. No. 41,265 Fish & Richardson P.C. 60 South Sixth St., Suite 3200 Minneapolis, MN 55402 Tel: 202-783-5070 Fax: 877-769-7945 Email: IPR50095-0260IP1@fr.com	David Holt, Reg. No. 65,161 Nicholas Stephens, Reg. No. 74,320 Charlene Thrower, Reg. No. 79,289 Joseph Bauer, Reg. No. 81,218 Fish & Richardson P.C. 60 South Sixth Street Minneapolis, MN 55402 Tel: 202-783-5070 Fax: 877-769-7945 Email: IPR50095-0260IP1@fr.com

/ Timothy Devlin /  
Timothy Devlin