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Ihr Zeichen / Your Ref.:	Unser Zeichen / Our Ref.	Datum / Date:
	A2379-020-DEI00Au Ts/Ah	10 February 2016

European Patent:	**EP 2 177 072 (DE document number 60 2008 022 036.2)**
Title:	**Messaging service in a wireless communications network**
Patentee:	**Rembrandt Messaging Technologies, LP, Arlington, VA 22209, USA**

NULLITY ACTION

In the name and on behalf of

Apple Retail Germany GmbH, Eschenheimer Anlage 1, 60316 Frankfurt am Main, Germany, represented by the managing directors with sole powers of representation Gene Daniel Levoff and Gary Joseph Wipfler, at the same address,

- Plaintiff -

Attorneys of record:

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In association with:
Attorneys of the law firm Freshfields Bruckhaus Deringer LLP, Feldmühleplatz 1, 40545 Düsseldorf, lead attorney: Wolrad Prinz zu Waldeck und Pyrmont, LL.M.IP

We hereby bring this **action**

a g a i n s t

Rembrandt Messaging Technologies, LP, 1655 North Fort Myer Drive, Suite 700, Arlington, Virginia, 22209, USA, **represented** by the General Partner Rembrandt Virginia Management, LLC, 1655 North Fort Myer Drive, Suite 700, Arlington, Virginia, 22209, USA, **represented** by Rembrandt IP Management, LLC, 401 City Avenue, Suite 900, Bala Cynwyd, PA 19004, USA, **represented** by the president Michael Johnson, at the same address

- Defendant -

Address for service according to the patent register:
Bosch Jehle Patentanwaltsgesellschaft mbH, Flueggstrasse 13, 80639 Munich, DE

for declaration of nullity of the European patent 2 177 072—hereinafter patent in suit—effective within the territory of the Federal Republic of Germany, registered with the German Patent and Trademark Office (GPTO) under file number 60 2008 022 036.2.

Value in dispute: preliminary estimate at EUR 1,250,000.00.

A. REQUESTS

We request:

1. that the European patent 2 177 072, effective within the territory of the Federal Republic of Germany, be revoked in its entirety (claims 1 through 18); and

2. that Defendant be ordered to pay the costs of the proceedings.

In addition, in view of the pending patent infringement proceedings (see section B.), we ask the Division to **schedule a hearing** for the earliest possible date.

The court fee in the amount of EUR 28,062.00 (4.5 fees of EUR 6,236.00) is payable by the attached direct debit authorization.

B. BACKGROUND OF THE ACTION

Nullity Defendant has sued Plaintiff in the present case before the Regional Court of Düsseldorf (case number 4a O 74/15) for alleged patent infringement of claim 17 in conjunction with claims 1, 2, 3 and 8, as well as of claim 18. We are enclosing a copy of the infringement action as

- EXHIBIT K1 -.

A main hearing date for the oral hearing has not yet been scheduled. However, in view of the pending infringement proceedings, we ask the Division to issue the notice in accordance with Section 83 para. 1 of the German Patent Act (PatG) as soon as possible and to set the date for the oral hearing in the present nullity proceedings as early as possible.

C. VALUE IN DISPUTE

Defendant has made a preliminary estimate of the value in dispute in the infringement proceedings at EUR 1,000,000.00. Thus, according to the settled case law of the Federal Court of Justice (BGH), we have set our preliminary estimate of the value in dispute for the nullity proceedings at EUR 1,250,000.00.

Before the background that, according to our view, the patent in dispute does not cover the products of the plaintiff (of this proceedings), this value is justified. In the parallel infringement proceedings, the plaintiff (of this proceedings) considers the value of dispute used by the defendant (of this proceedings) in the infringement proceedings to be too low. The District Court of Düsseldorf has announced to decide on the value in dispute of the parallel infringement proceedings in the context of the assessment of cost security on 25 February 2016. We will inform the Court accordingly.

Nevertheless we ask the Court to serve the present nullity complaint already based on the value in dispute of EUR 1,250,000.00 preliminarily provided in order to avoid any potential delay in the service of the complaint.

D. STATEMENT OF CLAIM

I. Formal matters relating to the patent in suit

The patent in suit has a total of 18 claims, of which three are independent, namely a method claim 1, an apparatus claim 17 (mobile wireless device) and a computer program product claim 18. A current extract from the patent and utility model register of the GPTO, submitted as

- EXHIBIT K2 -

indicates that the patent in suit is in force, and that Defendant is its registered owner; further, that the patent in suit was registered on 18 July 2008 as Euro PCT Application PCT/AU2008/001043 (EP 08 77 2669.1)—claiming two Australian priorities of 24 July 2007 (AU 20007903979 P) and of 13 November 2007 (AU 2007906230 P)—

and its granting was published on 6 February 2013 by the European Patent Office (EPO). No opposition was filed against the patent in suit.

We are submitting a copy of the patent in suit as granted (EP 2 177 072 B1) as

- EXHIBIT K3a -

and a copy of the PCT application underlying the patent in suit PCT/AU2008/001043, published as WO 2009/012516 A1, as

- EXHIBIT K3b -.

The patent in suit was limited in a **limitation procedure** under Article 105a, b, c EPC which was apparently carried out by the patentee in order to avoid novelty destroying prior art (see the following under item VIII.1, IX.1 and X.1). We are submitting the request for limitation dated 26 November 2014 as

- EXHIBIT K3c -,

and the decision of the European Patent Office in accordance with Rule 95 (3) EPC dated 5 March 2015, with the approved amended documents as

- EXHIBIT K3d -.

The limitation of the patent in suit was published by the EPO on 29 July 2015. We are submitting a copy of the patent in suit in the limited version (EP 2 177 072 B3) as

- EXHIBIT K3e -.

II. Grounds for nullity

As grounds for nullity, we assert:

lack of patentability of the subject matter of the patent in suit pursuant to Article 138 para. 1 lit. a EPC in conjunction with Article II Section 6 para. 1 no. 1 of the German Law on International Patent Conventions (IntPatÜG), namely on the grounds of

- lack of inventive step (Article 56 EPC).

III. Prior art

With respect to the prior art, we refer to the following citations, appended hereto as Exhibits. None of these citations was taken into consideration in the grant procedure of the patent in suit before the European Patent Office. In the subsequent limitation procedure, an examination of patentability was of course not conducted regardless (Rule 95 (2) EPC):

1. The prepublished Korean patent application KR 10 2006 0077401, published on 5 July 2006, hereinafter referred to as "**LG**,"

   - EXHIBIT K4a -,

   a German translation of this Korean patent application KR 10 2006 0077401

   - EXHIBIT K4b -,

   as well as a certificate of the translator,

   - EXHIBIT K4c -,

2. The prepublished international patent application WO 2004/061583 A2, published on 22 July 2004, hereinafter referred to as "**MOTOROLA**,"

   - EXHIBIT K5 -,

3. The prepublished international patent application WO 2005/018257 A1, published on 24 February 2005, hereinafter referred to as "**NOKIA**,"

   - EXHIBIT K6 -.

In addition, the following five documents from the grant procedure are mentioned on the cover page of the patent in suit:

WO 2006/014603 A2, US 2006 167 849 A1, US 2002 0777 131 A1, US 6 678 524 B1, article Hui Lei et al., “Context-aware unified communication,” 2004. Of these, for the time being we are submitting only the three prior publications acknowledged in paragraphs [0006], [0007], [0008] of the patent in suit:

4. WO 2006/014603 A2, hereinafter referred to as "**CINGULAR WIRELESS**",

– EXHIBIT K7 –,

5. US 2006 167 849 A1, hereinafter referred to as "**ECHOVOX**",

– EXHIBIT K8 –,

6. Article Hui Lei et al., “Context-aware unified communication,” Proceedings of the 2004 IEEE International Conference on Mobile Data Management (MDM’04), Berkeley, USA, 19-22 January 2004,

– EXHIBIT K9 –.

IV. Summary

The patent in suit claims a method for sending messages in a wireless communications network (**claim 1**) and a mobile wireless device programmed to perform a corresponding method (**claim 17**), as well as a corresponding computer program product (**claim 18**).

The independent claims of the patent in suit as granted have been modified in a limitation procedure before the European Patent Office.

The subject matters of the independent claims as granted are **not novel** in several respects.

First, they are **anticipated with novelty-destroying effect** by the citation **LG** (Exhibit K4). Second, the citation **MOTOROLA** (Exhibit K5) also discloses all of the features of the independent claims as granted. Furthermore, the citation **NOKIA** (Exhibit K6) has a detrimental effect on the novelty of the subject matters of the independent claims as granted.

Moreover, the subject matters of the limited independent claims are in any case **rendered obvious** by the prior art.

Starting in each case from **LG (K4), MOTOROLA (K5),** or **NOKIA (K6)** in conjunction with his **common general knowledge**, the person skilled in the art will arrive in each case at the subject matters of the limited independent claims in an **obvious** manner.

Nor do the subject matters of the **dependent claims 2 to 16** go beyond the usual craftsmanship of the person skilled in the art of relevance here.

V. Subject matter of the patent in suit

The patent in suit concerns a messaging service in a wireless communications network.

In this respect, the patent in suit proceeds from the basis of the popular SMS messaging service (Short Messaging Service), which was first introduced in the GSM system for mobile communications in the 1990s and later included in subsequent wireless standards. However, the patent in suit sees the disadvantage in the SMS messaging service that an SMS message is limited to 160 characters due to the

underlying transfer protocol SS7 (Signaling System 7). Longer messages are therefore sent in multiple SMS messages (K3e, para. [0002]).

A Short Messaging Service Center (SMSC) is responsible for the delivery of SMS messages in a wireless communications network. An SMS message sent by a user is first delivered to the user's SMSC, which then delivers the SMS message—where applicable through additional SMSCs—to the recipient (K3e, para. [0003]).

There are several messaging services that provide an extension to SMS. Here, the patent in suit mentions the Enhanced Messaging Service (EMS), which uses existing SMS infrastructure and allows up to 255 SMS messages to be packaged as one EMS message. The EMS message can carry richer content such as animation, pictures, sounds and formatted text (K3e, para. [0004]).

An additional messaging service, the Multimedia Messaging Service (MMS), can transmit images, audio clips and videos. Unlike SMS and EMS—according to the patent in suit—MMS messages are delivered using a mobile packet data network, such as the GPRS network, thus providing an Internet Protocol (IP) overlay to the existing GSM networks (K3e, para. [0004]).

On the other hand, the patent in suit makes reference to Mobile Instant Messaging (MIM) services, which enable messaging in real-time via IP data networks (Internet). To this end, users need to register a user name tag. Many MIM services also require users to maintain a persistent connection with the Internet during a chat session (K3e, para. [0005]).

In this context, the patent in suit refers to a paper by Hui Lei et al. (Exhibit K9) which discloses a unified communication system that selects an appropriate device for a recipient when there is an incoming call. This system also monitors the

context of the communicating parties and decides if the call should be migrated to another device of the recipient (K3e, para. [0006]).

Finally, the patent in suit mentions the prior publication US 2006/167849 A1 (Exhibit K8), which discloses an MIM system (K3e, para. [0007]), as well as the prior publication WO 2006/014603 A2 (Exhibit K7), according to which wireless devices communicate in the form of email, SMS and instant messaging (IM) (K3e, para. [0008]).

Without explicitly stating a problem underlying the invention, the patent in suit claims against this background a **method** for providing a messaging service on a mobile wireless device in a wireless communications network according to **claim 1** in the relevant English version:

1. A method for providing a messaging service on a sender's mobile wireless device in a wireless communications network; the method comprising: the sender's mobile wireless device (112) retrieving, a destination address associated with a recipient's mobile wireless device (122), from an outgoing message on the sender's mobile wireless device (112); the sender's mobile wireless device verifying whether the destination address is capable of receiving the outgoing message via a packet-switched bearer, wherein the step of verifying the destination address involves sending an address verification request to a message server; wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN; in the event verification is affirmative, the sender's mobile wireless device then automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer; but otherwise, the sender's mobile wireless device automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer.

In addition, in **claim 17** the patent in suit claims a **mobile wireless device** that is programmed to perform the claimed method

17. A mobile wireless device (112) programmed to perform each of the steps of the method according to any preceding claim.

and finally in **claim 18**, a **computer program product** comprising program code adapted to perform a method in accordance with claim 1:

18. A computer program product comprising computer program code adapted to perform the following method steps when the computer program is executed on a sender's mobile wireless device (112): the sender's mobile wireless device (112) to retrieve, a destination address associated with a recipient's mobile wireless device (122), from an outgoing message on the sender's mobile wireless device; the sender's mobile wireless device (112) to verify whether the destination address is capable of receiving the outgoing message via a packet-switched bearer; wherein the step of verifying the destination address involves sending an address verification request to a message server; wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN; in the event verification is affirmative, the sender's mobile wireless device (112) to automatically send the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer; but otherwise, the sender's mobile wireless device (112) to automatically send the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer.

Method claim 1 can be translated into German as follows and broken down into features. We have highlighted the features that were added to the claim as granted in the limitation procedure:

1. A method for providing a messaging service on a sender's mobile wireless device in a wireless communications network;

the method comprising:

2. the sender's mobile wireless device (112) retrieving a destination address associated with a recipient's mobile wireless device (122) from an outgoing message on the sender's mobile wireless device (112);

3. the sender's mobile wireless device verifying whether the destination address is capable of receiving the <u>outgoing</u> message via a packet-switched bearer;

   3.1 <u>wherein the step of verifying the destination address involves sending an address verification request to a message server;</u>

   3.2 <u>wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN;</u>

4. in the event verification is affirmative, the sender's mobile wireless device then automatically sending the <u>outgoing</u> message to the recipient's mobile wireless device at the destination address via the packet-switched bearer;

5. but otherwise, the sender's mobile wireless device automatically sending the <u>outgoing</u> message to the recipient's mobile wireless device at the destination address via an SMS bearer.

For the convenience of the Division and the parties, we are also submitting this feature analysis separately as

– EXHIBIT K10 –.

The features of sibling apparatus claim 17 and computer program product claim 18 correspond in substance to the features of method claim 1. Accordingly, our comments below apply equally to all of the independent claims 1, 17 and 18, unless expressly mentioned.

VI. Relevant person skilled in the art

The person to whom the patent in suit is addressed, i.e., the **average person skilled in the art** relevant to the case at hand, is a specialist in the field of communications technology. He has relevant knowledge from the field of information and communication technology, in particular as regards services for transmitting messages in different networks, such as mobile wireless networks, the Internet and in local wireless networks.

He typically has a university degree in the field of electrical engineering with an emphasis on communications engineering or computer science, and has several years of practical experience in the design and deployment of wireless messaging services such as those used by mobile devices, and in particular by mobile phones, for instance from his work in the R&D department of a relevant enterprise. Through this work, he is familiar with the relevant standards in this field. Some of these standards (e.g. GSM, GPRS, SMS, MMS) are mentioned by the patent in suit, for example, in its introductory section (K3e, para. [0002] – [0004]).

VII. Technical and functional meaning of the subject matter of the claim

The subject matter of the claim is a messaging service on a mobile device, or more precisely on a mobile wireless (end) device *("mobile wireless device").*

The messaging service of the patent in suit enables a message to be sent to the mobile wireless device of a recipient, namely in two ways: via a packet-switched bearer (**feature 4**) or via an SMS bearer (**feature 5**).

Thus, the subject matter of the claim combines the modes of transmission of existing messaging systems such as SMS and EMS on the one hand (feature 5 – SMS bearer) and IM (instant messaging) or MIM (Mobile Instant Messaging) on the other (feature 4 – packet-switched bearer) in a single system. According to the patent in suit, this offers a single interface to the user for sending text and multimedia messages that contain, for example, pictures and videos. The automatic selection of the appropriate message bearer based on information about the capabilities and the current status of the recipient offers the user a wide range of messaging options, including text, voice, video and pictures (K3e, para. [0010]).

In this respect, the packet-switched bearer supposedly has the advantage over SMS bearers that it can deliver messages with unlimited size at a higher speed (K3e, para. [0011]). As the patent in suit already explains in the introduction (K3e, para. [0002] – [0004]), the size of a single SMS message is limited to 160 characters. Up to a certain degree, larger messages can be split up into multiple SMS messages or packed together in an EMS—comprising up to 255 SMS messages.

As an example of an SMS bearer, the patent in suit mentions the classic GSM signaling channel SS7. In contrast, packet-switched bearers are based for example on

the GPRS extension of the classic GSM network or the subsequent wireless standards HSDPA, WCDMA, CDMA2000, as well as on other wireless access technologies such as Bluetooth, WiFi or WiMax (K3e, para. [0011]). The patent in suit counts MMS as one of the packet-switched bearers, *inter alia* (K3e, para. [0004]).

The mobile wireless device of the sender chooses between the two bearers using information concerning the recipient. To this end, the mobile wireless device verifies whether the recipient of the outgoing message is "capable" of receiving it via a packet-switched bearer (**feature 3**). If this is the case, the sender's mobile wireless device then automatically sends the message via the packet-switched bearer (feature 4), otherwise via the SMS bearer (feature 5).

The verification of the capabilities of the recipient is carried out with reference to the address of the recipient, i.e. the destination address of the outgoing message that the mobile wireless device retrieves from the message (**feature 2**). A destination address, according to the patent in suit, may be for example mobile phone numbers, email addresses, instant messaging user handles or IP addresses, or also a shortcode ("alias") or "channel", each representing one or more of these addresses (K3e, para. [0012] and [0038] – [0040]).

Another optional aspect that can be offered to the user in the exemplary embodiment of the patent in suit is to add attachments such as text, voice, video or pictures

to the outgoing message, if the packet-switched bearer—and not the SMS bearer—is selected (K3e, para. [0024]).

These **essential aspects of the invention** explained above correspond to the subject matter of claim 1 as granted, i.e. features 1 to 5 without features 3.1 and 3.2. These essential aspects of the invention are also summarized in paragraph [0009] and explained in the immediately following paragraphs of the patent in suit.

This subject matter was supplemented by two further features 3.1 and 3.2 in the **limitation procedure** before the European Patent Office.

According to **feature 3.1**, the verification whether the recipient is capable of receiving the outgoing message via a packet-switched bearer is realized by sending an address verification request to a message server.

The second limitation in accordance with **feature 3.2** calls for the verification request to be sent to the message server via a base station and the Internet using a WPAN (Wireless Personal Area Network) or WLAN (Wireless Local Area Network). The claim language does not specify whether the base station is a wireless base station or a base station of a wireless local area network. In the first case, the use of the WLAN/WPAN would not take place until the network side. Defendant in the present case is likely presuming the second case in the parallel infringement proceedings. This is the understanding we will initially proceed from here as well.

This is illustrated by way of example in Figure 1 of the patent in suit reproduced below:

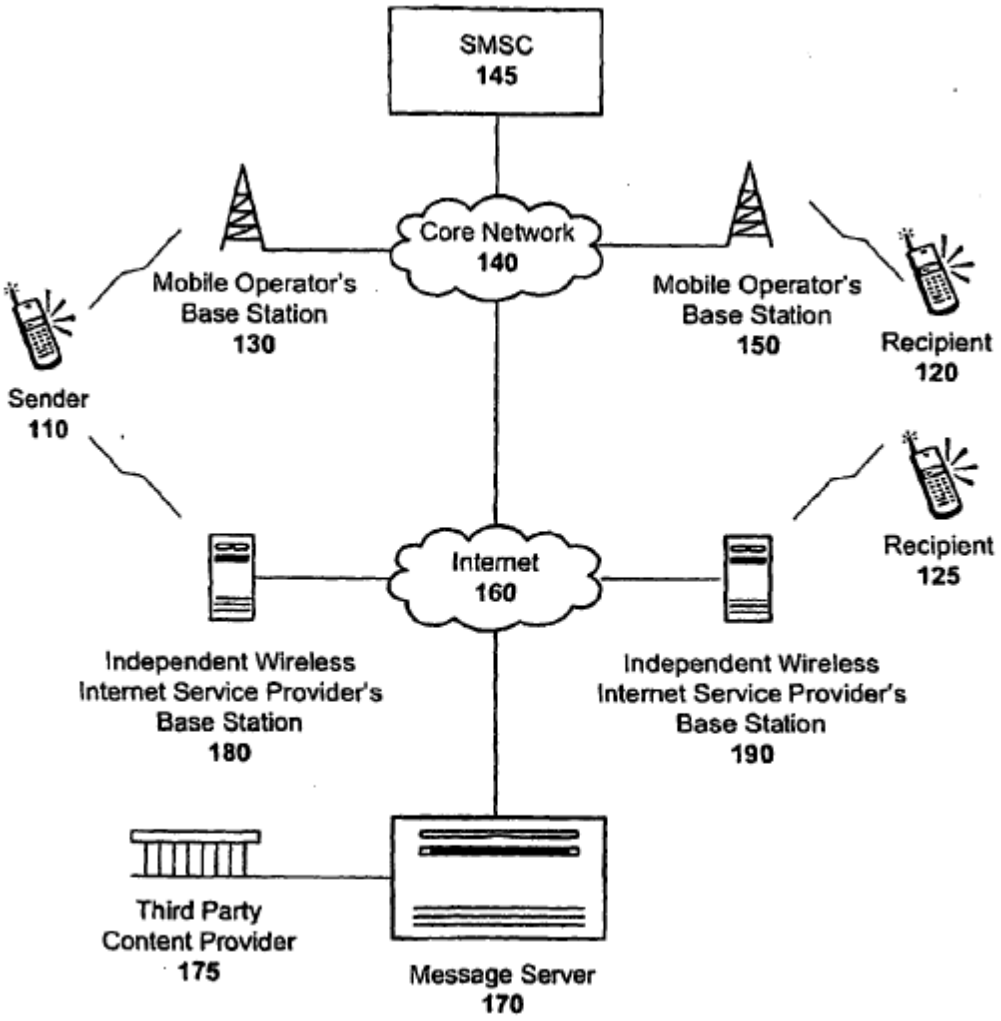


Figure 1 shows the message server 170 to which the sender 110 addresses the verification request in accordance with feature 3.1. There are two alternative ways provided there for this verification request, either via a wireless communication base station 130 or via a wireless Internet base station 180. In the first case, the mobile wireless device sends the verification request via its mobile interface, in the second case via its WLAN or WPAN interface. The corresponding passages of the patent in suit describe these two options as alternatives to one another (K3e, para. [0034], [0048] and [0054]):

> *"As shown in Fig. 1, the sender 110 may be connected to the message server 170 via a mobile operator's data network (base stations 130) <u>or</u> a network provided by an independent mobile Internet service provider (base station 180)."* (K3e, para. [0048] – emphasis added)

> *"The client then sends a verification request to the message server 170 via base station 130 <u>or</u> 180 and the Internet 160; step 215."* (K3e, para. [0054] – emphasis added)

The patent in suit does not specify any particular advantages or functions of either of these options. Rather, the patent in suit describes both options as known and refers to the respective common standards such as GSM, CDMA, 3G and 3.5G concerning the mobile communication interface, and to Bluetooth or WiFi concerning the WPAN or WLAN interface (K3e, para. [0034] and [0035]).

The claim subject matter has now singled out one of these two alternatives with feature 3.2—at least in the understanding of Defendant in the parallel infringement proceedings—namely the sending of the verification request via the WPAN or WLAN interface of the mobile wireless device.

In contrast, for the actual sending of the outgoing message—either via SMS bearer or via packet-switched bearer—the claim makes no specifications as to which network (mobile network or WLAN) and accordingly which interface should be used for this purpose. For example, according to the patent in suit (K3e, para. [0047]), the mobile wireless device can send a message via a packet-switched bearer in either a mobile network (e.g. using GPRS) or in a WPAN or WLAN network (e.g. using Bluetooth or WiFi protocol).

VIII. Lack of patentability of the subject matter of the claim in view of LG (K4)

VIII.1 LG (K4) discloses the subject matter of claim 1 as granted with novelty-destroying effect

The prepublished **LG (K4)** was not taken into consideration in the grant procedure and is cited here for the first time against the patent in suit. In the executed limitation procedure an examination of patentability was not conducted regardless.

LG describes a method for sending messages in a mobile communication terminal. LG proceeds here from the popular instant messaging (IM) messaging services used via the Internet, which also enables users to exchange files, for example, as attachments of messages (K4b, p. 2, line 32 – p. 3, line 5).

Sending a message to a recipient within the instant messaging system usually requires an existing online Internet connection of the sending and the receiving mobile communication terminal. In the event that the recipient is offline (i.e. not connected to the Internet), LG therefore provides for sending the message to the recipient via the known—and always available—SMS short messaging service (K4b, p. 3, line 1-5). However, LG sees it as a problem here that in the sending mobile communication terminal, the SMS menu must first be manually called up, and the phone number of the recipient and finally even the message must be input (K4b, p. 3, line 12-18).

Therefore, LG proposes as a solution a method that allows a message to be sent to a recipient in two ways, either via IM or SMS, depending on whether the recipient is online at the time. For this purpose, the sending mobile communication terminal first establishes the connection status of the recipient. In the event of the recipient is not connected to the Internet, the sending mobile communication terminal searches and automatically uses the phone number required to send the message via SMS (K4b, p. 6, line 3-4).

Hence, LG—like the patent in suit—combines MIM messaging via the Internet and thus packet switching with SMS message transmission, thereby providing a single and at the same time user-friendly mobile messaging service (cf. LG (K4b), p. 1, line 29-30; patent in suit (K3e), para. [0010]).

As we will first show in the following, LG discloses all the features of claim 1 as granted.

a) Feature 1 states:

> 1. A method for providing a messaging service on a sender's mobile wireless device in a wireless communications network;

LG discloses a so-called *"mobile communication terminal"* (K4b, Abstract), which acts as a transmitter in wireless radio communication systems such as (W)CDMA, UMTS or GPRS (K4b, p. 2, line 19-21) for sending and receiving messages, such as instant messaging (IM) and SMS messages (K4b, p. 2, line 14-18). Apart from the traditional and always available SMS short messaging service, LG mentions as an example for the popular IM messaging services MSN (Microsoft Network), IRC (Internet Relay Chat) and ICQ (I Seek You) (K4b, p. 2, line 27-31).

Thus, LG discloses a messaging service that is provided on a sender's mobile wireless device in a wireless communications network – **feature 1**.

Features 2 to 5 define the method steps taking place in the mobile wireless device.

b) Feature 2 states:

> 2. the sender's mobile wireless device (112) retrieving a destination address associated with a recipient's mobile wireless device (122) from an outgoing message on the sender's mobile wireless device (112);

LG describes a mobile communication network in which data can be sent and received (K4b, p. 4, line 2-4). The mobile communication network comprises at least two mobile wireless devices, wherein one can act as a sender and the other as a recipient (K4b, Fig. 1).

LG explains, in the description of both the general process when sending a message by means of the IM messaging service (K4b, p. 5, line 29-31) as well as the process

of the method deemed inventive in LG according to Figure 3 (K4b, Fig. 3 – *"selecting the user to send a message")*, that in order to send a message, the sender's mobile wireless device selects a "specific user"—for example from a list stored in the terminal—to whom the message should be sent (K4b, p. 5, line 32-38). This "specific user" selected in this manner thus serves as identification of the recipient to whom the message is sent, and thus as its address—or "destination address" in the parlance of the patent in suit claim. Based on the specification of this "specific user," the IM server establishes among other things its online status and—if positive—later delivers the message to the recipient (K4b, p. 5, line 2-6).

Thus, LG discloses a sender's mobile wireless device that retrieves a destination address associated with a recipient's mobile wireless device from an outgoing message on the sender's mobile wireless device – **feature 2**.

c) Features 3-5 state:

> 3. the sender's mobile wireless device verifying whether the destination address is capable of receiving the outgoing message via a packet-switched bearer;
> 4. in the event verification is affirmative, the sender's mobile wireless device then automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer;
> 5. but otherwise, the sender's mobile wireless device automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer.

According to the method of LG carried out in the sender's mobile wireless device, the mobile wireless device, when it wants to send a message to a "specific user" (i.e. to a destination address within the meaning of the patent in suit), first determines the (current) state of the Internet connection of this user. In particular, the mobile wireless device verifies here whether the user is "online" and it can therefore send him a message via the Internet, where this is directly carried out in the

event the verification is affirmative (K4b, p. 5, line 37 – p. 6 line 2; p. 4, line 11-18). The Internet of course represents a packet-switched network (cf. for instance also patent in suit (K3e), para. [0005]), via the packet-switched bearers of which the user can receive messages in the "online" case.

Thus the sender's mobile wireless device verifies whether the destination address is capable of receiving the outgoing message via a packet-switched bearer – **feature 3**.

d) LG further teaches that to send a message to a specific user

> "*the state of the user's Internet connection is first determined and then, if the specific user is online, the message to be sent* [is] *directly input and sent (S2, S3).*" (K4b, p. 5, line 37 – p. 6, line 2)

Accordingly, the sender's mobile wireless device automatically sends the input message to the recipient in the event that of the recipient ("specific user") is online, i.e. if the verification is affirmative. As already mentioned, a message transmission between two Internet-connected mobile wireless devices within an instant messaging system takes place via a packet-switched bearer.

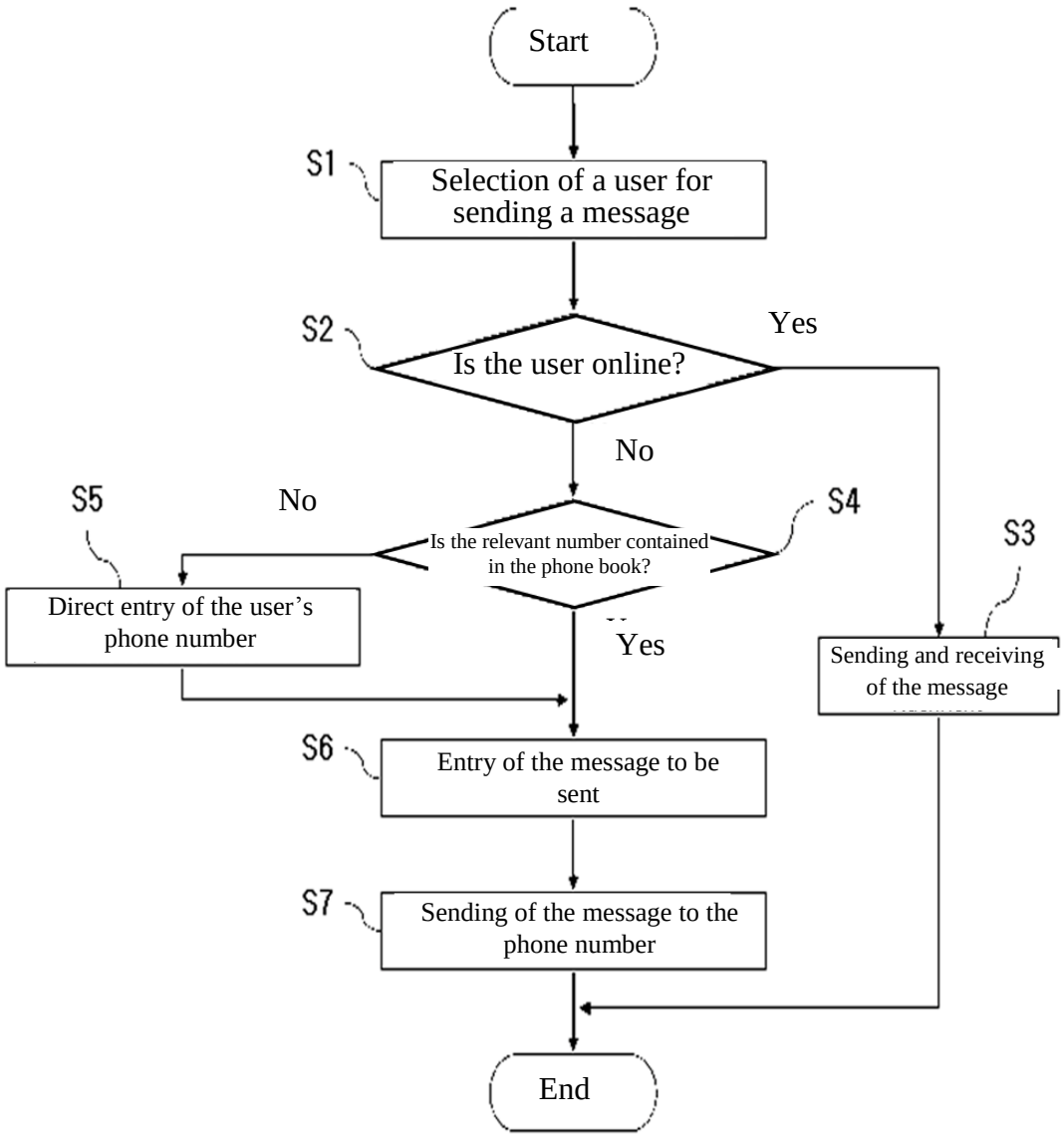
Thus, LG discloses that in the event verification is affirmative, the sender's mobile wireless device then automatically sends the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer – **feature 4**.

e) For the other case described in LG, i.e. where the user is "offline" and thus the verification is not affirmative (K4b, p. 6, line 3-4)

> "*... the user's phone number is automatically ... searched.*
>
> *If the searched telephone number is present, a* <u>*short message creation mode*</u> *is entered to input the message to be sent (S4, S6). ...*
>
> *When creating the message is finished, the* <u>*message is transmitted*</u> *...*"(K4b, p. 6, line 3-13, emphasis added)

In this "negative" case, the sender's mobile wireless device automatically sends the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer *("short message creation mode," "short message service (SMS)," "sending the message as an SMS";* K4b, p. 2, line 14-18; p. 3, line 1-5; Summary) – **feature 5**.

The verification carried out in the mobile wireless device (feature 3) with the two resulting alternative decisions of sending the message via packet-switched bearer (feature 4) or via SMS bearer (feature 5) illustrated by LG in Figure 3 reproduced below (associated description K4b, p. 5, line 29 – p. 6 line 13):



After the selection of a specific user to whom a message should be sent (program step S1), the sending mobile wireless device verifies in program step S2 with the query *"Is the user online?"* whether the user's mobile wireless device to whom the message is addressed is capable of receiving it via the Internet and the instant messaging service and thus packet-switched. Hereby, both the basic capability to receive the message through the packet-switched bearer as well as the concrete readiness to receive at any given moment is verified. If this verification is affirmative *("Yes")*, the program follows the right branch of the flow chart in step S3 and immediately sends the message as an IM message over the Internet. However, if the addressed user or his mobile wireless device is "offline," so that the verification in program step S1 ends with a negative result *("No")*, the conventional SMS short message path is taken along the left branch of the flow chart (S4, S5, S6, S7), i.e. the message text is input and sent via the SMS bearer to the mobile wireless device of the addressed user (S6, S7). First, the sending mobile wireless device retrieves the telephone number of the receiving mobile wireless device that is associated with the addressed user from its stored telephone book, which is required to send the message via SMS to the addressed user (S4). If the phone number is not stored in the telephone book of the sending mobile wireless device, the user can enter it directly (S5).

Consequently, as an **interim conclusion** LG already directly and unambiguously discloses **features 1, 2, 3, 4,** and **5**, thereby anticipating claim 1 as granted with **novelty-destroying effect**.

VIII.2 LG (K4) in any case implicitly discloses feature 3.1 of the first limitation

The "first limitation" added as feature 3.1 to the claim as granted in the limitation procedure states:

> 3.1 wherein the step of verifying the destination address involves sending an address verification request to a message server

LG describes an instant messaging system consisting of the at least two mobile wireless devices and at least one server, the IM server (K4b, p. 4, line 11-18). The IM server manages, *inter alia*, the status and the reception mode of the users of the instant messaging system and transmits the messages between the users that are "online" (K4b, p. 4, line 19-24). The IM server thus corresponds to the "message server" within the meaning of the patent in suit. According to the method disclosed in LG, the mobile wireless device, when it intends to send a message to a specific user, determines the status (online/offline) of that specific user in a separate step (S2 in Fig. 3) (K4b, p. 5, line 37-38 – p. 6, line 1-2). This separate step for the verification of the destination address requires access to the information managed by the IM server about the status of the specific user.

Even if LG does not describe this verification request at the IM server in detail, LG in any case implicitly discloses the step claimed in **feature 3.1** to those skilled in the art of verification by sending an address verification request to the message server.

VIII.3 LG (K4) renders feature 3.2 of the second limitation obvious in conjunction with the common general knowledge

The teaching described in LG renders the second limitation of claim 1 as granted that was added in the limitation procedure, and thus the limited subject matter of the claim, obvious to the person skilled in the art. In particular, the person skilled in the art will infer the alternative selected through the second limitation from his common general knowledge.

The "second limitation" added as feature 3.2 to the claim as granted in the limitation procedure states:

> 3.2 wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN;

As already explained above, the person skilled in the art will at least implicitly infer from the teaching of LG that the sending mobile wireless device addresses a corresponding verification request to the IM server in order to query the status of the receiving mobile wireless device of the addressed user. How and in what way this takes place in detail is left open by LG. However, those skilled in the art cannot ignore the fact that the IM server is an Internet server, i.e. a server that is accessed over the Internet.

Since LG relates to a mobile or wireless communication service between mobile communication terminals, the question will arise for the person skilled in the art who is faced with the task of implementing LG's teaching in practice of what options are available to address the status query of the mobile communication terminal to the IM server.

For this purpose, he will initially have two options in principle. On the one hand, via the mobile wireless interface of the terminal and the base stations of the mobile wireless network (CDMA, WCDMA, UMTS, GPRS) and from there via the Mobile Switching Center (MSC) to the so-called "backbone" network and further via interfaces of the mobile network (such as via the GGSN = GPRS Support Node) to the Internet. Or, on the other hand, via a short range wireless interface of the terminal, i.e. in particular a WLAN interface, and a local (WLAN) base station "directly" to the Internet. Then as now, these are the two basically available and widely used ways to access a server on the Internet from a mobile terminal. In the same manner, the patent in suit also refers to these two options as interchangeable alternatives (K3e, para. [0034], [0048], [0054]), from which the claim subject matter singles one out in feature 3.2.

In implementing the teaching of LG, the person skilled in the art would also take the claimed alternative of Internet access via WLAN (or WPAN) into consideration as at least an obvious possibility due to the fact that the IM server is an Internet server and WLAN interfaces in mobile wireless devices are of course specifically designed for these types of mobile access to Internet servers such as the IM server.

This applies *a fortiori* in that WLAN-enabled mobile wireless devices, i.e. mobile wireless devices with a WLAN interface for the exchange of data via the Internet, had not only already long been known in the technical literature at the priority date of the patent in suit (the WLAN standard IEEE 802.11 dates as far back as to the year 1997 and was gradually expanded due to its wide acceptance and dissemination), but were in fact already available on the market in the mobile wireless devices of renowned mobile phone manufacturers, at least in high-end devices. It was therefore an obvious step for the person skilled in the art to jump on the bandwagon and to design a terminal device in line with the trend at the time. Even then, it was apparent that at least in the high-priced segment, mobile wireless devices without a WLAN interface would soon be unsellable.

As evidence that a plurality of mobile phone manufacturers had already placed mobile wireless devices with a WLAN interface on the market at the priority date, we are submitting as

- SET OF EXHIBITS K11 -

documents that show by way of example the deep market penetration that already existed on the priority date.

Set of Exhibits K11 shows screenshots of a wireless test published on FOCUS-Online entitled “The Ten Best Mobile Phones” dated 21 June 2007. As can be seen from the individual screenshots, of the ten mobile phones at the time, eight mobile phones were already equipped with a WLAN interface. These include, *inter alia*, the following mobile phone models: Nokia N93, Nokia E61i, Nokia N95, VPA Compact gps (Vodaphone), T-mobile Ameo, T-mobile MDA Vario II, o2 Xda Terra and o2 XDA Orbit.

As can also be seen from Set of Exhibits K11, the relevant technical magazines, such as CHIP, c’t magazine and connect, indicate that there was already a wide range of mobile phones of leading manufacturers with a WLAN interface for the exchange of data over the Internet before the priority date. By way of example, Set

of Exhibits K11 lists mobile wireless devices with a WLAN interface of the manufacturers MOTOROLA, HTC, ASUS, Samsung and Sony Ericsson.

Furthermore, we refer to an article contained in Set of Exhibits K11 dated 23 February 2004—i.e. approximately 3.5 years before the priority date of the patent in suit and half a year before the filing date of LG (K4)—from the website "Heise online." As is known, "Heise Online" publishes news from the fields of telecommunications and IT. The article entitled "3GSM World Congress: First Mobile Phone with WLAN Wireless" describes the then-imminent launch of the first mobile phone with a WLAN interface. This interface was in particular supposed to "not only provide fast and inexpensive access to the Internet, but also enable telephony connections via voice over IP."

The subject matter of the limited claim 1 is therefore **rendered obvious** by **LG (K4)** in conjunction with the **common general knowledge**.

IX. Lack of patentability of the subject matter of the claim in view of MOTOROLA (K5)

IX.1 MOTOROLA (K5) discloses the subject matter of claim 1 as granted with novelty-destroying effect

MOTOROLA (K5) relates to the merger of different services for the transmission of messages between so-called mobile messaging devices such as mobile phones in a wireless communication system. The focus is in particular on the Short Messaging Service (SMS), the Enhanced Messaging Service (EMS), and the Multimedia Messaging Service (MMS) (K5, para. [0002]), which can exist concurrently in a network (K5, para. [0003]).

In such a network, it may occur that a mobile terminal is only capable of receiving SMS, but not MMS. If a mobile device sends, for example, an MMS message to such a non-MMS-compatible mobile terminal, the MMS message is typically

bounced back to the sending mobile terminal unread (K5, para. [0003]).

MOTOROLA thus describes the problem that before sending an outgoing message, the sending mobile terminal has no knowledge of whether the addressed mobile terminal is at all capable of receiving the outgoing message (K5, para. [0005]).

MOTOROLA proposes a method as a solution to this problem in which the sending mobile wireless device verifies the capability of the receiving mobile wireless device to receive certain messaging formats before sending an outgoing message (K5, para. [0022] et seqq.).

In other words, the sending mobile wireless device in MOTOROLA—as in the patent in suit—decides the manner in which it transmits a message to be sent, either via MMS and thus packet-switched, or via SMS and thus via an SMS bearer. The mobile wireless device makes this decision based on information about the recipient that it retrieves, for example, from a web server prior to sending the message.

As we will first show in the following, MOTOROLA discloses all the features of claim 1 as granted.

a) Feature 1 states:

> 1. A method for providing a messaging service on a sender's mobile wireless device in a wireless communications network;

MOTOROLA discloses mobile wireless communication devices such as mobile phones, which are capable of sending and receiving formatted messages such as SMS, EMS and MMS messages through the relevant messaging service (K5, para. [0022], [0024]). These mobile wireless devices thus provide a messaging service in a wireless communications network according to **feature 1**.

b) Feature 2 states:

> 2. the sender's mobile wireless device (112) retrieving a destination address associated with a recipient's mobile wireless device (122) from an outgoing message on the sender's mobile wireless device (112);

In MOTOROLA, each mobile communication device is associated with an address, namely for example with a network-specific subscriber number of the mobile subscriber (MSISDN). The sender's mobile wireless device *("the first mobile wireless communication device")* retrieves the destination address from an outgoing message that is being input on the sender's mobile wireless device (K5, para. [0061]: ("*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 recipient(s)*"). Thus, MOTOROLA discloses **feature 2.**

c) Features 3-5 state:

> 3. the sender's mobile wireless device verifying whether the destination address is capable of receiving the outgoing message via a packet-switched bearer;
> 4. in the event verification is affirmative, the sender's mobile wireless device then automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer;
> 5. but otherwise, the sender's mobile wireless device automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer.

A sending mobile wireless device in MOTOROLA verifies, based on the address of the recipient, whether it is capable of receiving an MMS message (K5, para. [0061], 1st sentence).

MOTOROLA offers a combined messaging service for the same reasons as the patent in suit, thereby enabling packet-switched (multimedia) message transmission in addition to traditional SMS messaging: With SMS, the size and scope of the message to be sent is limited (K5, para. [0062]: "*limited messaging capabilities*").

In order to overcome this limitation and in particular to enable the transmission of (multimedia) messages with more extensive contents and file attachments, pictures, videos or voice, packet-switched message transmission is to be used, which unlike SMS does not have these limitations. As an example for such a packet-switched message transmission, the patent in suit mentions MMS (patent in suit (K3e), para. [0004], [0010], [0011]; see also our above remarks on the claim subject matter under VII.). MOTOROLA explains along the same lines that in sending a message via SMS instead of MMS, attached multimedia files are lost, i.e. they cannot be transmitted (K5, para. [0062]: "*any attached/inserted multimedia files will be lost*").

Thus, MOTOROLA discloses a sending mobile wireless device that verifies according to feature 3 whether the destination address is capable of receiving a packet-switched message *("MMS message")* (K5, para. [0061]: *"find out if they are capable of receiving an MMS message"*).

d) In the event that the mobile wireless device of the recipient *("second mobile wireless communication device")* is capable of receiving a packet-switched message *("MMS message")*, the sender's mobile wireless device sends the message formatted as an MMS message (K5, para. [0061]). As is known, this MMS message is transmitted in switched packets. This is also explained in the patent in suit (K3e, para. [0004]).

Thus, MOTOROLA discloses that in the event verification is affirmative, the sender's mobile wireless device automatically sends the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer – **feature 4**.

e) In the other case, i.e. if the recipient is incapable of receiving an MMS message ("*In the case that the second mobile wireless communication device does not support MMS messaging*" – K5, para. [0061]), the sender's mobile wireless device transforms the message from MMS format to SMS format and sends the message as

an SMS message to the recipient, i.e. via an SMS bearer (K5, para. [0026], [0061], [0062]).

MOTOROLA thus discloses that in the event that verification is not affirmative, the outgoing message is sent to the recipient's mobile wireless device at the destination address via an SMS bearer – **feature 5**.

In other respects, MOTOROLA furthermore gives the user of the sending mobile wireless device the option to have a say in whether the message should be sent at all in the case of non-verification. However, this is only an optional embodiment *("Further, <u>if desired,</u> the first wireless communication device <u>may</u> operate ..."* – K5, para. [0026]) that provides an additional selection option for the user with respect to a sending without confirmation—as in the case of sending as an MMS.

Apart from this, the subject matter of the claim does not rule out such a confirmation before the actual "automatic" sending of the message, regardless. On the contrary, it is instead comparable to the exemplary embodiment of the patent in suit, in which in the case of packet-switched transmission—the user is involved before actually sending the message by the fact that he is offered the option to specify an attachment for the message (K3e, Fig. 3, reference numerals 224, 226; para. [0057], [0058]), so that he must consequently "manually" trigger the sending of the message by a confirmation, such as that illustrated in the "SEND" box of Figure 2 (K3e).

Hence, as an **interim conclusion** MOTOROLA discloses **features 1, 2, 3, 4** and **5**, thereby anticipating claim 1 as granted with **novelty-destroying effect**.

IX.2 MOTOROLA (K5) discloses feature 3.1 of the first limitation

Furthermore, MOTOROLA also discloses feature 3.1 of the "first limitation" added in the limitation procedure.

Feature 3.1 states:

> 3.1 wherein the step of verifying the destination address involves sending an address verification request to a message server;

In MOTOROLA, the sender's mobile wireless device contacts the network to determine whether the destination address is capable of receiving an MMS message (K5, para. [0061], 1st sentence). Moreover, MOTOROLA describes that the network element within the network may be a web server or other server (K5, para. [0039]).

Thus, MOTOROLA discloses sending an address verification request to a message server within the meaning of **feature 3.1**, at least in the interpretation of the local defendant in the parallel infringement proceedings (Exhibit K1, p. 19, par. 2, 3; p. 31, below).

IX.3 MOTOROLA (K5) renders feature 3.2 of the second limitation obvious in conjunction with the common general knowledge

The teaching described in MOTOROLA renders the second limitation of claim 1 as granted that was added in the limitation procedure, and thus the limited subject matter of the claim, obvious to the person skilled in the art. In particular, the person skilled in the art will infer the alternative selected through the second limitation from his common general knowledge.

The "second limitation" added as feature 3.2 to the claim as granted in the limitation procedure states:

> 3.2 wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN;

As already explained above, MOTOROLA describes that the sending mobile wireless device addresses a corresponding verification request to the server in order to

query the status of the receiving mobile wireless device of the addressed user.

In this respect, MOTOROLA teaches a system consisting of mobile wireless devices that are connected via a wireless network, such as a cellular wireless network, Internet, or other suitable network (K5, para. [0028]). In particular, the server to which the verification request is directed is a web server (K5, para. [0039]), i.e. an Internet server.

The web server is therefore on the Internet, so that the person skilled in the art will infer the teaching from MOTOROLA to send the verification request over the Internet to the web server.

Since MOTOROLA relates to the transmission of messages between mobile wireless terminals *("mobile wireless communication device")*, the person skilled in the art who is faced with the task of realizing the sending of the verification request to the Internet web server in practice will seek to answer the question of what options are available in this respect.

For this purpose, he will initially have two options in principle. On the one hand, via the mobile wireless interface of the terminal and the base stations of the mobile wireless network and from there via the Mobile Switching Center (MSC) to the so-called "backbone" network of the mobile wireless network and further via gateways and interfaces to the Internet. Or, on the other hand, via a short range wireless interface of the wireless terminal, i.e. in particular a WLAN interface, and a local (WLAN) base station "directly" to the Internet. Then as now, these are the two basically available and widely used ways to access the Internet from a mobile terminal. In the same manner, the patent in suit also refers to these two options as interchangeable alternatives (K3e, para. [0034], [0048], [0054]), from which the claim subject matter singles one out in feature 3.2.

In implementing the verification request at a web server described in MOTOROLA, the person skilled in the art would also take the claimed alternative of Internet access via WLAN (or WPAN) into consideration as at least an obvious possibility due

to the fact that the web server is an Internet server and WLAN interfaces in mobile wireless devices are of course specifically designed for these types of mobile access to Internet servers such as the web server.

This applies *a fortiori* in that WLAN-enabled mobile wireless devices, i.e. mobile wireless devices with a WLAN interface for the exchange of data via the Internet, had not only already long been known in the technical literature at the priority date of the patent in suit (the first version of the WLAN standard IEEE 802.11 dates as far back as to the year 1997 and was gradually expanded due to its wide acceptance and dissemination), but were in fact already available on the market in the mobile wireless devices of renowned mobile phone manufacturers, at least in high-end devices. It was therefore an obvious step for the person skilled in the art to jump on the bandwagon and to design a terminal device in line with the trend at the time. Even then, it was apparent that at least in the high-priced segment, mobile wireless devices without a WLAN interface would soon be unsellable.

As evidence that a plurality of mobile phone manufacturers had already placed mobile wireless devices with a WLAN interface on the market at the priority date and this was also described in the relevant technical literature, we refer to Set of Exhibits K11 already submitted above in respect of LG, which indicates the deep market penetration that already existed on the priority date.

The subject matter of the limited claim 1 is therefore **rendered obvious** by **MOTOROLA (K5)** in conjunction with the **common general knowledge**.

X. Lack of patentability of the subject matter of the claim in view of NOKIA (K6)

X.1 NOKIA (K6) discloses the subject matter of claim 1 as granted with novelty-destroying effect

NOKIA (K6) relates to mobile devices that can transmit messages using several different messaging services and related types of data transmission such as SMS, MMS and email (K6, p. 1, line 6-13). In particular, NOKIA addresses the problem that with the terminals in the prior art, the user first has to choose a messaging service, in advance, i.e. before entering and sending a message, whereupon then the corresponding editor opens (K6, p. 1, line 13-21), which NOKIA views as disadvantageous (K6, p. 1, line 22-26).

To solve this, NOKIA proposes an automatic selection of the data transfer method after or during the input of the message to be sent based on certain message-related criteria before (K6, p. 2, line 8-19). The selection is made for example by a central message editor in which the message is entered regardless of the data transfer method yet to be selected (K6, p. 5, line 34 – p. 6, line 1). As a specific criterion, NOKIA refers to the use of a data transfer method that is associated with the receiver address entered for the message which may be stored in an address book or separately (K6, p. 9, line 32 – p. 10, line 9).

NOKIA discloses all the features of claim 1 as granted, as we will explain below.

a) Feature 1 states:

> 1. A method for providing a messaging service on a sender's mobile wireless device in a wireless communications network;

NOKIA discloses mobile wireless communication devices such as mobile stations that implement a number of different messaging services (such as SMS, MMS and email, K6, p. 1, line 8-11) and data transfer methods (K6, p. 2, lines 17-19: "*mobile station which supports several alternative data transfer methods*," see also Fig. 2). The corresponding services are provided by a wireless network such as a GSM or

UMTS network (K6, p. 4, line 6-22) (K6, Fig. 1 and p. 3, lines 24-27: *"teleservices TS*") and by applications on the mobile station side (K6, Fig. 2 and p. 5, line 14-29: "*data transfer applications APP*"). The message editor that is also available on the mobile station (K6, Fig. 2: *"message editor ED")* is used to enter a message to be sent and to select a data transfer method (e.g. *"SMS application," "MMS application,"* K6, p. 5, line 24-25) for transmitting the message via an associated messaging service (K6, p. 5, line 34 – p. 6 line 1 and line 8-17).

Thus, in NOKIA a messaging service is provided on the sender's mobile wireless device – **feature 1**.

b) Feature 2 states:

> 2. the sender's mobile wireless device (112) retrieving a destination address associated with a recipient's mobile wireless device (122) from an outgoing message on the sender's mobile wireless device (112);

NOKIA stipulates that the user composing the message also enters an identifier of the recipient of the message in addition to the message contents (K6, p. 6, line 23-25: "*user has selected and/or entered the receiver of the message*"; p. 9, line 33-34: "*identifiers of different receivers*"). This receiver identifier corresponds to the associated destination address of the claim. By means of this destination address entered into the message, a search is subsequently carried out at NOKIA in an address book (K6, p. 9, line 35 and p. 10, line 5: *"contact information")* or separately stored conditions (K6, p. 10, line 3: *"selection conditions")* to identify the data transfer method associated with the destination address. For this purpose, the sender's mobile wireless device must retrieve the destination address entered by the user from the message to be sent, whereby **feature 2** is disclosed by NOKIA.

c) Features 3-5 state:

> 3. the sender's mobile wireless device verifying whether the destination address is capable of receiving the outgoing message via a packet-switched bearer;

4. in the event verification is affirmative, the sender's mobile wireless device then automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via the packet-switched bearer;

5. but otherwise, the sender's mobile wireless device automatically sending the outgoing message to the recipient's mobile wireless device at the destination address via an SMS bearer.

In NOKIA, a sending mobile wireless device verifies using the receiver identifier whether the recipient is capable, for example, of receiving an MMS message:

> "*For example, contact information determines a default data transfer method contact-specifically. Then, when the contact information is searched for transmission information (an address or a telephone number), it is simultaneously checked whether or not a default data transfer method has been associated with the receiver information. Thus, the property information which has been determined in the selection conditions and on the basis of which the data transfer method is selected is, for example, a particular telephone number or an IP address. The selection conditions included in the contact information or stored separately may <u>determine whether or not it is possible for the receiver to receive e.g. MMS messages</u>.*" (K6, p. 9, line 34 – p. 10, line 7 – emphasis added)

By looking up the destination address in the conditions of the address book (or in the separately stored conditions), the mobile wireless device thus verifies whether the recipient has MMS capability. Since MMS messages, as is well known, are always transmitted via packet-switched bearers (for example via GPRS, see K6, p. 10, line 18-20), the mobile device thereby verifies whether the recipient can receive the message via a packet-switched bearer – **feature 3**.

d) The message is then sent accordingly as an MMS message in the event of a positive response, i.e. an affirmative verification (cf. K6, p. 10, line 7-9), which takes place automatically. The latter follows by implication from K6, p. 10, line 28-31, where a further user confirmation to send the message according to the automatically selected data transfer method is described as an additional function. Consequently, **feature 4** is also disclosed in NOKIA.

e) In addition to the example explicitly mentioned by NOKIA that the condition for a specific identifier of a recipient is "MMS," the person skilled in the art will appreciate that for recipients that are not MMS-capable, the condition will not state "MMS." For such non-MMS-capable mobile stations, the condition will then state for example "SMS," as this messaging service is supported by virtually all non-MMS-capable GSM and/or UMTS mobile stations (see introduction of K6, p. 1, line 8-10: "*Many terminal devices support e.g. transfer of text-form short messages (Short Message Service SMS) […]*." In such a case, the verification of whether the recipient can receive packet-switched messages is negative—the search for the specification of the data transfer method results in "SMS." In this case, the mobile station of the sender then sends the message accordingly as an SMS message. Thus, **feature 5** is also disclosed by NOKIA.

Hence, as an interim conclusion, the subject matter of claim 1 as granted is **not novel** in view of NOKIA.

IX.2 NOKIA (K6) renders feature 3.1 of the first limitation obvious in conjunction with MOTOROLA (K5)

The first limiting feature 3.1 added in the limitation procedure ("first limitation"), and thus the correspondingly limited subject matter is rendered obvious starting from the teaching of NOKIA in conjunction with MOTOROLA.

Feature 3.1 states:

> 3.1 wherein the step of verifying the destination address involves sending an address verification request to a message server;

At NOKIA, the verification whether the recipient is, for example, MMS-capable and thus can receive packet-switched messages is carried out by a <u>query</u> of an address book or <u>separately stored conditions</u> (K6, p. 10, line 5-6. *"selection conditions included in the contact information or **stored separately** may determine whether or not*

it is possible for the receiver to receive, e.g., MMS messages"), which link the identifier of the receiver with the messaging type and the data transfer method supported by the recipient. NOKIA thus states that the conditions are either contained in the address book or stored separately. Therefore, the person skilled in the art implementing the teaching of NOKIA is faced with the task of providing the conditions of the data transfer method of the respective receiver for queries within the meaning of the exemplary embodiment on p. 9, line 32 – p. 10, line 9 of NOKIA.

To this end, the person skilled in the art will rely, for example, upon the related teaching of MOTOROLA (K5) (K5, para. [0023], p. 6: "*such phonebook may be located separate from the sending mobile wireless communication device including at a location on the network*"; emphasis added). As we have already explained above, in MOTOROLA the information whether the recipient is capable of receiving an MMS message is provided within a network on a server (K5, para. [0061], 1st sentence), for example on a web server (K5, para. [0039]). The sender's mobile wireless device therefore directs a corresponding query to this web server. Accordingly, it is an obvious matter of course for the person skilled in the art implementing the query of the conditions to follow the teaching of MOTOROLA in this respect, i.e. to store the conditions mentioned by NOKIA as stored in the address book or separately on a web server within the meaning of MOTOROLA and to then query this for the verification whether the recipient is MMS-capable.

Hence, the sending of an address verification request to a messaging server pursuant to **feature 3.1** and thus the correspondingly limited subject matter is **rendered obvious** by NOKIA in conjunction with MOTOROLA, at least in the interpretation which was taken as basis for feature 3.1 by the local defendant in the parallel infringement proceedings (Exhibit K1, p. 19, par. 2, 3; p. 31, below).

X.3 NOKIA (K6) also renders feature 3.2 of the second limitation obvious in conjunction with MOTOROLA (K5)

The teaching described in NOKIA also renders the second limitation of claim 1 as granted that was added in the limitation procedure, and thus the limited subject matter of the claim, obvious to the person skilled in the art.

The "second limitation" added as feature 3.2 to the claim as granted in the limitation procedure states:

> 3.2 wherein the verification request is sent to the message server (170) via base station (180) and the Internet (160) using a WPAN or WLAN;

As explained above, it is obvious to design the query known in NOKIA of the conditions stored in the address book or separately as a web server query, like in MOTOROLA.

Moreover, it is just as obvious to send this query via a base station, the Internet and via a WPAN or WLAN as directed by feature 3.2. NOKIA namely already knows mobile stations that can also establish WLAN or Bluetooth connections along with mobile wireless connections, i.e. that have the appropriate WLAN or Bluetooth capability:

> "*The data transfer method selection according to the invention may be applied, e.g., to a portable computer enabling messages to be transmitted therefrom using several different data transfer methods, for instance via a wired connection, a WLAN connection, a GPRS connection or a Bluetooth connection.*" (K6, p. 3, line 19-23; emphasis added)

Since the conditions are found on a web server in accordance with MOTOROLA and thus are on the Internet, it automatically follows that the verification request to this web server is sent via a WLAN base station or a Bluetooth base station, the Internet and a WLAN or Bluetooth network (= WPAN). Thus, the person skilled in the art will also readily arrive at **feature 3.2** from NOKIA.

The subject matter of the limited claim 1 is therefore **rendered obvious** by **NOKIA (K6)** in conjunction with **MOTOROLA (K5)**.

XI. Lack of patentability of sibling claims 17 and 18

The above attacks can be applied analogously to the independent apparatus claim 17 in conjunction with claim 1 and the independent computer program product claim 18.

Thus, LG (K4), MOTOROLA (K5) and NOKIA (K6), each considered in isolation, anticipate claim 17 in conjunction with claim 1 as granted as well as the computer program product claim 18 as granted with detrimental effect to novelty.

Moreover, LG, MOTOROLA and NOKIA, each considered in isolation, at any rate render claim 17 in conjunction with the limited claim 1 obvious, as well as the limited computer program product claim 18.

XII. Lack of patentability of dependent claims 2 to 16

Nor can any patentable content be identified in the dependent claims. For the most part, they relate solely to features that are part of the common general knowledge of the relevant person skilled in the art here, and merely concern routine configurations that do not go beyond the usual craftsmanship. The subject matters of the dependent claims are therefore at any rate rendered obvious by the cited prior art, taking into account the common general knowledge:

1. **Claim 2** lists a number of possible meanings of the term "destination address." Among other things, the list contains a mobile phone number, a numeric "shortcode" or an alias. The two citations LG (K4) and MOTOROLA (K5) each use the phone numbers of mobile wireless devices as the destination address (see for instance K4, Abstract and K5, Fig. 4: "recipient ID"). Claim 2 further specifies that present information of the recipient is provided to the sender. This step is at any rate already disclosed by LG in that the sending mobile wireless device learns the online or offline state of the recipient and in the case of the identified offline state, searches for the user's phone number (e.g. K4, claim 1: *"A second step for automatically searching the*

phone number of a user when the user is offline"). The features of claim 2 are thus certainly known from LG.

2. **Claim 3** relates to connecting to the message server via the Internet before verifying the destination address. This is disclosed by LG (K4, Fig. 1 and p. 4, line 11-25:
"a mobile communication terminal, ... comprising the application program to interact with the IM server, said server providing the instant messaging service in question and a base transmission station (Base Transceiver Sub-system: BTS), which is connected via the terminal and the wireless channel and can exchange the wireless messages" and p. 5, line 31-33: *"In order to perform instant messaging with a number of users ... the instant messaging program is first executed").* Claim 3 also specifies the base station to the effect that it is a base station of the wireless Internet, which is operated by an independent provider of wireless services. LG's IM server is an Internet server. As already stated above, the option to connect mobile wireless devices with the IM server using WLAN is certainly rendered obvious by LG. It also necessarily follows from the use of WLAN that the base station is part of the wireless Internet. According to claim 3, this base station is moreover operated by an independent service provider. To the extent this feature has any limiting technical content at all, it is certainly satisfied by common WLAN service providers. Overall, then, the subject matter of claim 3 is not inventive in light of LG.

3. **Claims 4 to 7** all refer to one common aspect that is detached from the essential idea of the patent in suit (automatic bearer selection—packet switching vs. SMS bearer), namely to the provision of connection parameters for connecting the sender's mobile wireless device to the message server.

It is generally known that in the course of establishing a connection between a sender's mobile wireless device and an Internet server, connection parameters are exchanged. That these are displayed on the sender's mobile wireless device, for example (claim 4), simply represents a common approach in the art. In order to connect the mobile wireless device to the server, the patent in suit proposes over-the-air (OTA) programming (claim 5) or an OTA configuration message (claims 6 and 7). The subject matters of claims 4 to 7 thus represent nothing more than a common configuration for connecting a mobile wireless device to the Internet server using an over-the-air configuration message. CINGULAR WIRELESS (K7), for example, discloses such over-the-air programming (K7, para. [0101]-[0102] and Fig. 5). In addition, CINGULAR WIRELESS discloses that updates or patches can be transmitted over-the-air to the mobile wireless device with or without user intervention (K7, para. [0101] and [0159]). Thus, the subject matters of claims 4 to 7 are at any rate rendered obvious, taking into account the teaching of CINGULAR WIRELESS (K7) or the common general knowledge.

4. **Claim 8** relates to receiving a notification from the message server specifying whether the destination address is capable of receiving the message via a packet-switched bearer. This is disclosed by MOTOROLA (K5, para. [0025]: "*<u>The second mobile wireless communication device messaging format capabilities information</u> 110 is received back <u>from the network 108</u> through the transceiver 102 to the mobile wireless communication device messaging determinator circuitry 104. The second mobile wireless communication device messaging format capabilities information 110 is stored in memory 107…* ."—emphasis added). Receiving the *"messaging format capabilities"* information of the destination address corresponds to a notification according to the claims. The features of claim 8 are thus known from MOTOROLA.

5. **Claim 9** relates to the automatic provision of options for adding attachments to the message if a packet-switched bearer is selected. According to **claim 10**, these attachments can be text, voice, video or picture files. MOTOROLA discloses that the message is sent using packet switching as a default, i.e. is sent

as an MMS (K5, p. 31, para. [0062]: "*It should be noted that a message may be initially formatted in the default messaging capabilities of the sending device, (e.g., MMS format)*"). It is known that for MMS messages, adding attachments is always possible. If no packet-switched bearer is selected (e.g. SMS), the user of the sending mobile wireless device is informed that the message will be sent without attachments (K5, p. 30, para. [0062]: "… *will advise the user that any attached/inserted multimedia files will be lost*"). Accordingly, MOTOROLA allows the optional attachment of data for packet-switched bearers and therefore discloses the features of claims 9 and 10. LG (K4) similarly points out the possibility of transmitting attachments with the IM messaging service that uses packet switching (K4, p. 2, line 32-36).

6. **Claim 11** relates to the formatting of the message according to the selected bearer before sending the message. MOTOROLA discloses this step (K5, para. [0022]: "*Such devices, using the messaging format capabilities information, then send a message to a target mobile wireless communication device in a format that can be processed by the target mobile wireless communication device.*" and para. [0062]: "*a message … may be reformatted in a new format … before being sent.*"). The features of claim 11 are thus known from MOTOROLA.

7. **Claims 12 to 15** relate to the common aspect that information for the recipient is appended to the SMS message in the event that SMS was selected as the bearer. The features of these claims are in any case shown in ECHOVOX (K8) and/or rendered obvious in light thereof. In detail:

8. **Claim 12** relates to the appending a system message to the outgoing message if an SMS bearer is selected. ECHOVOX relates to an instant messaging system within which in particular a so-called notification message is shown. This does not contain the actual message and may therefore be called a system message (para. [0033]: "*Thread update notification messages do not contain the original messages sent by the clients … only a notification flag indicating that a new message is available from that thread.*"). It too is transmitted via a SMS bearer. Proceeding on this basis, the person skilled in the art knows that a system message can also be appended to an outgoing message as needed. Hence, the features of claim 12 are certainly rendered obvious in view of ECHOVOX.

9. **Claim 13** relates to an invitation to add the destination address to a list of subscribers if the address is not on the list. ECHOVOX (K8) discloses sending an invitation to a subscriber via SMS to enable connection to the IM service (K8, para. [0013],[0034]). Thus, it is also obvious to use this mechanism to invite a recipient to join an IM service, in case this should not yet have occurred.

10. **Claim 14** relates to the case that the destination address that is on the subscriber address list has an inactive status. In this case, the system message comprises an invitation to retrieve messages in the message queue of the destination address. ECHOVOX relates to an instant messaging system that allows a registered user (para. [0032]: *"before initiating an IM session, users must first register for the service"*), who is in an offline or inactive state, to receive an invitation through a system message ("SMS") to retrieve the messages in the message queue (para. [0023]: "*a user, after having been invited by an SMS message, can retrieve all past messages of an IM session that were exchanged during his absence and can participate in the IM session if it is still ongoing.*"). Thus, ECHOVOX discloses the features of claim 14.

11. **Claim 15** relates to the step of notifying the destination address, if the destination address is on the subscriber list, when either a message has been received, or when a message is queued but not yet delivered. This too is disclosed by ECHOVOX (para. [0032]: "*before initiating an IM session, users must first register for the service*" and para. [0014]: "*if the buddy* [user of the instant messaging system] *is disconnected, then sending an offline notification to the buddy. ... The offline notification may be an SMS message indicating that an instant messaging session is available to the buddy.*" and para. [0015]: "*and enabling review of the messages of the instant messaging session.*"). The features of claim 15 are thus known from ECHOVOX.

12. **Claim 16** relates to queuing an outgoing message for later delivery if the outgoing message is undelivered. It is described in MOTOROLA, for example, that SMS and MMS messages represent "non-real-time store-and-forward" messages (K5, para. [0002], [0024]). This means that in case of an undelivered message, it is stored until a later delivery is successful. MOTOROLA thus discloses the features of claim 16.

* * *

According to all of the above, the application for revocation of the patent in suit is well-founded.

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Patent Attorney

<u>Exhibits</u>

K1: Infringement complaint from the parallel infringement proceedings (4a O 74/15);

K2: Extract from the patent and utility model register of the GPTO;

K3a: Granted version of the patent in suit EP 2 177 072 B1;

K3b: PCT Application PCT/AU2008/001043, published as WO 2009/012516 A1 (original application documents);

K3c: Request for limitation dated 26 November 2014;

K3d: Notice of the EPO in the limitation procedure dated 5 March 2015;

K3e: Limited version of the patent in suit EP 2 177 072 B3;

K4a: Prepublished Korean patent application 10 2006 0077401 (“LG”);

K4b: Certified German translation of the Korean patent application 10 2006 0077401;

K4c: Certificate of the translator;

K5: Prepublished international patent application WO 2004/061583 (“MOTOROLA”);

K6: Prepublished international patent application WO 2005/018257 (“NOKIA”);

K7: WO 2006/014603 A2 ("CINGULAR WIRELESS");

K8: US 2006 167 849 A1 ("ECHOVOX");

K9: Article Hui Lei et al., “Context-aware unified communication,” Proceedings of the 2004 IEEE International Conference on Mobile Data Management (MDM’04), Berkeley, USA, 19-22 January 2004;

K10: Feature analysis of claim 1;

K11: Documents concerning mobile wireless devices of different mobile phone manufacturers with a WLAN interface available on the market at the priority date.

7 copies (of which one certified copy of the statement of claim)

Payment of court costs in the amount of EUR 28,062.00