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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/345,809	02/01/2006	Thomas F. Doyle	050828	9369

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QUALCOMM INCORPORATED
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EXAMINER	
D AGOSTA, STEPHEN M	
ART UNIT	**PAPER NUMBER**
2617	

NOTIFICATION DATE	DELIVERY MODE
01/23/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	11/345,809	DOYLE, THOMAS F.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Hays and further in view of {Heinonen **or** Brederveld} and Smith.

As per **claims 1, 13 and 17,** Hays teaches a system to provide an indication to a user of a first wireless communication device that a communication is waiting or wanted (Abstract teaches calling device and mobile unit/called device and celluar/paging systems), the system comprising:

a first wireless communication device (mobile unit in figure 1) comprising a display indicator (figure 1 shows a mobile phone which inherently have display(s) for indicators, eg. incoming call, missed call, email waiting, SMS message waiting, battery level, signal strength level, service provider, wallpaper, etc.);

a second wireless communication device (figure 1 shows calling device #12);

a data link connecting the first communication device and the second communication device (figure 1 shows multiple links connecting to mobile unit via either cellular or paging networks);

a first wireless communication network connecting the first wireless communication device to the “network switching” center (figure 1 shows links connecting to the MTSO and UMS "centers"); and

a second wireless communication network connecting the second wireless communication device to the dispatch center, wherein when the first wireless communication device is outside of the first wireless communication network, the dispatcher can alert the user of the first wireless communication device that the

communication is waiting or wanted by causing the second wireless communication device to send a signal to the first wireless communication device causing the display indicator to indicate said alert (Abstract and pages 2-4 show that a called device can be connected via a first network and/or if out of range, then a second network can be used (eg. paging))

but is silent on a dispatch center being used and forwarding/transmitting a message from one mobile to another.

The use of a manned dispatch center is well known and can also be viewed as a more "manual" automated switching network such as Hays' MTSO/UMS components. Also the Applicant's Admitted Prior Art (AAPA) discloses network communications using a manned dispatch center for truck or delivery vehicles (see spec. Para #'s 2-3).

The concept of mobile-to-mobile "call relay" is well known in cellular, WLAN and short-range communication.

- Heinonen teaches a "bluetooth repeater" (Abstract and figures 1b-1c).

- Brederveld who teaches wireless relay via either Relay or Mobile Device (Abstract and figure 1 shows link from RS #140 to MS #123: `One or more of the access points or mobile stations may be dedicated relays (such as RS 150) that perform no function other than relaying messages).` See C4, L55-65

Lastly, **Smith** teaches a similar design as Hays in which a mobile device can be contacted via multiple different wireless/wired networks, especially if the device is out of range of a "first" network (Abstract, figure 1, Para's #10-11).

It would have been obvious to one skilled in the art at the time of the invention to modify Hays, such that a dispatch service is supported and call relay/forwarding, to provide means for forwarding a call if a certain mobile unit is out of range when a dispatcher needs to communicate with said certain mobile/user.

As per **claims 2 and 18,** the combo teaches claim 1, wherein the first wireless communication device is a digital wireless communication device (The prior art put forth teaches myriad wireless communications, including both digital and analog, both of which are well known in the art - see at least Hays, spec Page 1 disclosing AMPS and CDMA and TDMA. Note that for claim 18, the first device and network can be analog or digital).

As per **claim 3,** the combo teaches claim 1, **but is silent on** wherein the second wireless communication device is a combination digital and analog wireless communication device.

Note that Hays discusses support for both analog and digital which can be broadly interpreted as simultaneous and/or multiple transceivers on the same device (spec, page bottom page 1 to top of page 2). The examiner takes **Official Notice** that dual-mode phones are well known and can support two or more communication protocols/signals.

It would have been obvious to one skilled in the art at the time of the invention to modify the combo, such that the second device is a combo digital/analog device, to provide means for supporting different communications technologies.

As per **claim 4,** the combo teaches claim 1, wherein the second wireless communication device comprises at least a satellite communication device (the examiner takes note that satellite/cellular phones are well known and the prior art or record teaches many different communications technologies which would include satellite/cellular. See **Chou,** *pertinent but not cited*, C8, L25-30 which teaches support for satellite communications.).

As per **claim 5,** the combo teaches claim 1, wherein the first wireless communication network and the second wireless communication network are identical (The prior art teaches that a “first” link can be established and/or a “second” link if need be, eg. Smith teaches use of a second link if the user is out of range of the first link/network).

As per **claim 6,** the combo teaches claim 1, wherein the second wireless communication network encompasses the first wireless communication network (The ability for overlapping networks to occur is obvious, eg. for two different cellular networks, for hotspots within a cellular network, for WLAN and cellular, etc.. Hence the examiner takes **Official Notice** that a user with a multi-transceiver phone would seek to connect to the network giving the best/optimal data throughput if/having roamed into an overlapping area of two "cells" or "coverage areas". The prior art does not limit how the mobile device will act, Hays' teaching would allow the mobile to receive a page if the user is in an overlapping area where cellular coverage is "poor" yet paging works).

As per **claim 7,** the combo teaches claim 1, wherein the first wireless communication device is coupled to the second wireless communication device by a data link (the prior art shows that there are myriad configurations supported as to “who” the calling and called devices can be (eg. wired or wireless) and “how” they can be connected (eg. wireless protocols, wired protocols, paging, text, email, etc.).

As per **claims 8 and 19-20,** the combo teaches claim 7/17, wherein the data link is a wired link (at least Smith teaches a wired link being supported, see Abstract. All the prior art teaches support for wireless communications as per claim 20).

As per **claims 9 and 14,** the combo teaches claim 1/13, wherein the display indicator is selected from the group of indicators consisting of: a light, a vibration, a text display, or a ring tone (Hays teaches a “alerting message" being sent to the phone/pager, which reads on at least a vibration and/or display, eg. Missed Page indicator, as is well known in the art. Similarly, mobile phones can ring, vibrate, light up and display a message).

As per **claim 10,** the combo teaches claim 1, wherein the first wireless communication device and the wireless second communication device are mounted in a vehicle (The examiner believes that these two devices are in **DIFFERENT** vehicles. The prior art does not limit where the called and calling devices can be. The AAPA teaches dispatch networks for trucks and delivery vehicles which would inherently have truck-mounted communication units. Similarly **Rast**, *pertinent but not cited*, teaches a taxi network whereby the car has mounted communication units as well).

As per **claim 11,** the combo teaches claim 10, wherein the vehicle is selected from a group of vehicles consisting of: a car, a truck, a train, a plane, or a boat. (See AAPA and the prior art which discloses myriad uses and locations for the mobile units)>

As per **claims 12 and 15,** the combo teaches claim 1/13, wherein the first wireless communication unit is portable (Hays teaches a mobile unit, see figures 1-2).

As per **claim 16,** the combo teaches claim 13, **but is silent on** further comprising the step of: supplying a communication request confirmation signal to the dispatcher to confirm the communication request signal was received by the second wireless communication device.

The examiner takes **Official Notice** that the concept of a "confirmation message" is well known and would be used by one skilled if/when a message is relayed in order to provide confirmation that said relayed message was actually received by its intended recipient.

It would have been obvious to one skilled in the art at the time of the invention to modify the combo, such that a confirmation message is used, to provide means for confirming receipt when a message is not directly sent, but rather relayed (which could have a tendency to be dropped, etc.).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are found in the PTO-892 form.

- Rast (Abstract, figure 1 and Para #122)
- Chou (Abstract and C13, L50 to C14, L2)
    - Both teach a dispatcher-based communication system that supports communications using multiple conveyances (eg. cellular, paging, email, text, etc).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen M. D'Agosta/
Primary Examiner, Art Unit 2617