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	Address to: Mail Stop <i>Ex Parte</i> Reexam Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	EV 630 Attorney D	: Mail Label No. 861:115 US Docket No.:M-16056-RE U Ly 6, 2005
1. 🗶	This is a request for <i>ex parte</i> reexamination pursuant issued July 2, 1991 . The request is	o 37 CFR 1.510 of pate made by:	ent number 5,029,183
	patent owner.	requester.	⁶⁴⁶⁶⁰ U.S. РТО 90007617
2. X	The name and address of the person requesting reexa Edward C. Kwok <u>MacPherson Kwok Chen & Heid LLP</u>		07/08/05
	1762 Technology Drive, Suite 22	6	
	San Jose, CA 95110		
3. 🕎	a. A check in the amount of \$ is end	losed to cover the reex	amination fee, 37 CFR 1.20(c)
X	b. The Director is hereby authorized to charge the to Deposit Account No. <u>50–2257</u>	ee as set forth in 37 CF (submit duplicati	R 1.20(c)(1) ve copy for fee processing); or
	c. Payment by credit card. Form PTO-2038 is attac	ched.	
4. X	Any refund should be made by check or X 37 CFR 1.26(c). If payment is made by credit card, r	credit to Deposit Accou efund must be to credit	unt No. 50-2257
5. X	A copy of the patent to be reexamined having a dou enclosed. 37 CFR 1.510(b)(4)	ble column format on o	one side of a separate paper is
6.	CD-ROM or CD-R in duplicate, Computer Program	(Appendix) or large tab	le
7.	Nucleotide and/or Amino Acid Sequence Submissic If applicable, items a. – c. are required.	n	
	a. Computer Readable Form (CRF) b. Specification Sequence Listing on:		
	i. CD-ROM (2 copies) or CD-R (2 copies ii. paper); ог	
	c. C Statements verifying identity of above copies		
8.	A copy of any disclaimer, certificate of correction or r	eexamination certificate	e issued in the patent is include
9. 🗴	Reexamination of claim(s) 1, 16, 21, 35	, 40-41	is requested.
10. X	A copy of every patent or printed publication relied up Form PTO/SB/08, PTO-1449, or equivalent.		
11.	An English language translation of all necessary and	01 FC:18 pertinent non-English la	12 2520.00 DA anguage patents and/or printed

This collection of information is required by 37 CFR 1.510. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop *Ex Parte Reexam, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.* If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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12. XX The attached detailed request includes at least the f	ollowing items:	۶ ^۳
 a. A statement identifying each substantial new que publications. 37 CFR 1.510(b)(1) b. An identification of every claim for which reexami and manner of applying the cited art to every claim 	nation is requested, and a de	tailed explanation of the pertinency
13. A proposed amendment is included (only where the	patent owner is the requeste	er). 37 CFR 1.510(e)
14. XX a. It is certified that a copy of this request (if filed by the patent owner as provided in 37 CFR 1.33(c). The name and address of the party served and th Alan Israel		has been served in its entirety on
Kirschstein, Ottinger, Israel 489 Fifth Avenue	& Schiffmiller, P	.C
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New York, NY 10017-6105		
Date of Service: July 6, 2005		; or
b. A duplicate copy is enclosed since service on p		
15. Correspondence Address: Direct all communication about	ut the reexamination to:	
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16. The patent is currently the subject of the following of a. Copending reissue Application No. b. Copending reexamination Control No. c. Copending Interference No. d. Copending litigation styled:		
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WARNING: Information on this form may become pub included on this form. Provide credit card information	and authorization on PTO	-2038.
Authorized Signature	July 6, 20	
Edward C. Kwok	Date 33,938	
Typed/Printed Name	Registration No.	For Patent Owner Requester Tor Third Party Requester

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: L. Tymes Assignee: Symbol Technologies, Inc. Title: Packet Data Communication Network Patent No.: 5,029,183 ReExamination July 6, 2005 Filing Date: Unassigned ReExamination Edward C. Kwok ReExamination Control No. Requester: Group Art Unit: Unassigned Examiner: Unassigned Docket No.: M-16056-RE US

> San Jose, California July 6, 2005

Mail Stop Ex Parte Reexam COMMISSIONER FOR PATENTS P.O.Box 1450 Alexandria, VA 22313-1450

REQUEST FOR REEXAMINATION

Dear Sir:

Reexamination under 35 U.S.C. §§302-307 and 37 C.F.R. §1.510 is requested of United States Patent No. 5,029,183, which issued July 2, 1991, to LaRoy Tymes. This patent remains in force.

Reexamination is requested as to at least claims 1, 16, 21, 35 and 40-41 in view of prior art that was not of record during the prosecution of the '183 patent. As discussed in detail below, a substantial new question of patentability as to each of claims 1, 16, 21, 35 and 40-41 is raised by the prior patents and printed publications, as required by 37 C.F.R.

\$1.510(b)(1), and a detailed explanation of the pertinency and manner of applying the cited

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LAW OFFICES OF lact⁴herson, Kwok, Chen & Heid LLP 1762 Technology Dr., Suite 226 San Juse, CA 95110 (408)-392-9520 FAX (408)-392-9262 art to each such claim for which reexamination is requested is also included in this request, as required by 37 C.F.R. §1.510(b)(2).

Claims 1, 16, 21, 35 and 40-41 were the subject of prior litigation in the United States District Court for the District of Delaware, styled *Symbol Technologies, Inc. v. Proxim Incorporated*, Civil Action No. 1:01-cv-00801-SLR (the "Proxim litigation"). The Proxim litigation was settled following a trial. The '183 patent is currently asserted in litigation pending in the same court, styled, *Symbol Technologies, Inc. v. Intermec Technologies Corporation*, Civil Action No. 1:05-cv-00147-SLR (the "Intermec litigation"). It is not known whether the above claims are in issue in the Intermec litigation.

U.S. PATENT NO. 5,029,183

U.S. Patent No. 5,029,183 ("the '183 patent") issued on July 2, 1991, and was based on application Serial No. 07/374,452, which was filed June 29, 1989. The '183 patent identifies LaRoy Tymes as the named inventor. The '183 patent expires on June 29, 2009.

1. The '183 Patent Claims

The '183 patent has 84 claims. Claims 1, 21, 40, 50, 60, 70 and 76 are independent.

Claim 1 is directed to a "method of transmitting data packets from one of a plurality of remote terminal units to a base station." It includes two basic steps:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit, and

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

Claim 16 is dependent on claim 1 and recites an additional step, namely, "receiving at said unit prior to said step of transmitting said data packet to detect transmission by other like

LAW OFFICES OF MacPherson, Kwok, Chen & Heid LLP 1762 Technology Dr., Suite 226 San Jose, CA 95110 (408)-392-9520 FAX (408)-392-95262 units."

Independent claim 21 claims a "system for transmitting data packets from one of a

plurality of first stations to a second station." It includes two basic elements:

(a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station, and

(b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations.

Claim 35 is dependent on claim 21. As claim 16 was related to claim 1, Claim 35 is

likewise related to claim 21, and describes that "the transmitter at said first station receives

prior to transmitting said data packet to detect transmission by other stations."

Claims 40-41 have a similar type of relationship. In particular, independent claim 40

describes a "method of data transmission between a plurality of terminals and a base station."

That method includes several steps:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals;

(b) receiving said transmitted data packet at said base station and transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal, and

(c) receiving said acknowledgement at said one terminal during said predetermined time window.

Dependent claim 41 further requires the step of first "receiving at said one terminal to

detect transmission by another of said plurality of terminals, before transmitting said data

LAW OFFICES OF MacPherson, Kwok, Chen & Heid LLP 1762 Technology Dr., Suite 226 San Jose, CA 95110 (408)-392-9520 FAX (408)-392-9520 packet."

2. The '183 Patent Specification

In the "Summary of the Invention" section of the '183 patent (the "Summary"), the invention is summarized as providing a "packet data communication system [that] includes a number of remote terminals for gathering data, and a communications link for sending packetized data to a central station and for receiving an acknowledge signal and data from the central station[; wherein] a packet-exchange protocol [] used for this communication link [] provides reduced power dissipation at the remote unit by activating the receive function for only a short time, rather than requiring the remote unit to receive or "listen" at all times."¹ (Column 2, lines 56-66). The Summary then goes on to describe, from col. 2, line 66 to col. 3, line 2, additional features that are more or less recited in the claim language, namely:

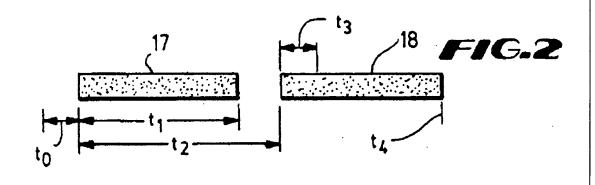
To this end, the exchange protocol establishes a rigid time window keyed to a transmission by the remote unit, and the remote unit is responsive to a message from the central station only during this time window. The time window is defined to being at a fixed time delay after a transmission from the remote unit to the central station.²

Thus, each of independent claims 1, 21 and 40 concerns a data communication protocol such as best illustrated in Figure 2 of the '183 patent (and reproduced below):

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¹ The subject matter directed to "reduced power dissipation at the remote unit ..." was not recited in any claim of the '183 patent.

 $^{^{2}}$ Independent claims 1, 21 and 40 do not speak of a central station, but rather describe this function in the context of the base station or a "second" station, as the case may be.



In representative claim 1, the data packet transmitted from the remote unit is seen above as reference numeral 17, and the base station-to-remote unit data packet is illustrated as reference numeral 18. The "first time period selected by the unit" would be the time at which time period t_1 starts, and the second time period (time t_3) occurring only a fixed time delay (either time t_2 as measured from the start time, or time $t_2 - t_1$ as measured from the end time of data packet 17) after the first time period is illustrated as time t_3 . The "fixed time delay" as recited in claim 1 is either time t_2 as measured from the start time, or time ($t_2 - t_1$) as measured from the end time of data packet 17. In representative claim 16, the unit receives "prior to said step of transmitting said data packet to detect transmission by other like units." This operation occurs during time t_0 above.

3. <u>The Prosecution History</u>

The '183 patent was filed as U.S. patent application, serial No. 07/374,452 in the U.S. Patent & Trademark Office on June 29, 1989. Application claims 1, 16, 21, 35 and 40-41 correspond to the corresponding issued claims. As originally filed, application claim 1 described a method of transmitting data packets from a communications unit, comprising two steps:

(a) transmitting a data packet from the unit during a first

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time period selected by the unit; and

(b) receiving at the unit an acknowledge signal during a second time period occurring only a fixed time delay after the first time period.

Dependent claim 16 described the further step of listening at the unit prior to the step of transmitting the data packet to see if other like units were transmitting. The claims were rejected on various grounds including indefiniteness, anticipation and obviousness.³ In a responsive amendment, the claims were amended into the form as they later issued, and the Applicant argued that "in the applicant's system the remote units transmit at any time, at their own choosing, then the base station must respond in a fixed time." (See, the Amendment, at page 6, received October 19, 1990). According to the Applicant's counsel, the claims distinguished over the cited art "by reciting that the remote unit selects its time of transmission (rather than the time being dictated by the base station), and reciting that the remote units receive at a fixed time after transmission (rather than the base station receiving from the remote units at a time slot)." Further, it was noted that "the claims recite that the fixed time or the time window is the same for all remote units, which would not be possible with the system of the [cited prior art] where time slots are dictated to separate in time the transmissions from remote units."

As the cited art apparently did not show "transmitting from the remote <u>at a time</u> <u>selected by the remote, then receiving only at a fixed time window</u>" (Amendment, at page 7, emphasis supplied), the claims, as amended, were allowed.

4. <u>The Proxim litigation Markman Ruling</u>

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³ The claims were rejected over cited art U.S. Patent No. 4,829,540 to Waggener, Sr. et al. and U.S. Patent No. 4,247,908 to Lockhart, Jr. et al.

A *Markman* claim construction ruling was issued in the Proxim litigation. A copy of that ruling is attached (Exhibit A). The Court there construed the following terms in the claims at issue here:

(a) "data packet" shall mean "a block of information that can be transmitted as a distinct entity."

(b) "remote terminal unit" shall mean a "wireless mobile unit."

(c) "base station" shall mean "a unit that transfers data between a remote terminal unit and a central computer, but which cannot initiate data communications with a remote terminal unit."

(d) "first time period selected by the unit" shall mean "a time period selected by the remote terminal unit during which the remote terminal unit transmits a data packet."

(e) "second time period occurring only a fixed time delay after said first time period" shall mean "a time period which occurs a fixed time after the first period."

(f) "receiving at said unit prior to said step of transmitting said data packet to detect transmission by other like units" shall mean the remote terminal unit "senses the medium before transmitting to determine whether the medium is in use."

THE PRIOR ART PRESENTED IN THIS REQUEST

The very features that were argued to distinguish the claimed invention over the cited references ("transmitting from the remote at a time selected by the remote, then receiving only at a fixed time window") were well-known in the prior art, but the relevant prior art references were not before the Examiner during the prosecution of the application.

LAW OFFICES OF MacTherson, Kwok, Chen & Heid LLP 1762 Technology Dr., Suite 226 San Jose, CA 95110 (408)-392-9520 FAX (408)-392-9262 Such prior art references include:

(a)	Binder et al. "ALOHA Packet Broadcasting: A Retrospect" AFIPS
	National Computer Conference Proceedings Volume 44 (May 19-22,
	1975), pages 203-215 (Exhibit B).

- (b) Fralick et al. "Digital Terminals for Packet Broadcasting" AFIPS
 National Computer Conference (NCC) Proceedings Volume 44 (May 19-22, 1975), pages 253-262 (Exhibit C).
- (c) Kleinrock et al. "Packet Switching in Radio Channels: Part I Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics," IEEE Transactions on Communications, Volume 23, No. 12, December 1975, pages 1400-1416 (Exhibit D).
- (d) U.S. Patent No. 4,479,261, to Oda et al., issued October 23, 1984, filed in the United States on April 18, 1983 (Exhibit E).
- U.S. Patent No. 4,720,710, to Akahori et al., issued January 19, 1988,filed in the United States on June 20, 1983 (Exhibit F).
- U.S. Patent No. 4,777,488, to Carlman, Jr. et al., issued October 11, 1988, filed May 16, 1986 (Exhibit G).

A SUBSTANTIAL NEW QUESTION OF PATENTABILITY

LAW OFFICES OF JacPherson, Kwok, Chen & Heid LLP 1762 Technology Dr., Suite 226 San Juse, CA 93110 (408)-392-9520 FAX (408)-392-9262 Kleinrock et al. (Exhibit D) describe the ALOHA System, an actual broadcast radio communications system that was in use to provide radio communications among computer

installations in Hawaii as early as 1970. On page 1401, the authors describe the "pure

ALOHA" scheme that:

... permits users to transmit <u>any time they desire</u>. If, <u>within some appropriate time-out period</u>, they receive <u>an</u> <u>acknowledgement</u> from the destination, then they know that no conflicts occurred.

(emphasis supplied)

To further elaborate the acknowledgement scheme, Kleinrock et al. state at page 1403

that:

Some acknowledgement scheme is necessary to inform the transmitter of its success or failure. We assume a positive acknowledgement scheme; <u>if within some specified delay (an</u> <u>appropriate time-out period) after the transmission of a packet</u>, a user does not receive an acknowledgement, he knows he has conflicted.

(emphasis supplied)

Thus, in the first instance, Kleinrock et al. described the two features -- "transmitting from the remote at a time selected by the remote, then receiving only at a fixed time window" (Amendment, page 7, October 19, 1990) – that, allegedly, were absent from the prior art cited during the '183 patent's prosecution history. For this reason, the Kleinrock et al. paper itself raises a substantial new question of patentability with respect to at least claims 1, 21 and 40.

Kleinrock et al. also describe the by then (in 1975) well-known technique of

attempting "to avoid collisions by listening to (i.e., 'sensing') the carrier due to another's

user's transmission." Such carrier sense multiple access (CSMA) techniques are the subject

of dependent claims 16, 35 and 41. Thus, Kleinrock et al. also raise a substantial new

question of patentability with respect to these claims.

While Kleinrock et al. provide a theoretical analysis of the data packet communication

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protocols, Binder et al. and Fralick et al (Exhibits B and C) describe the ALOHA System, sometimes referred to as ALOHANET, in great detail. These articles were both published in the AFIPS Conference Proceedings for the National Computer Conference of May 19-22, 1975 at Anaheim, California. Each article describes the basic transmit-when-desired, acknowledge-within-timeout protocol identified in the Kleinrock et al. paper.⁴ In Binder et al., the original remote units were referred to as Terminal Control Units (TCUs); once microprocessors became available (by the mid-1970s), users of the ALOHANET took advantage of what the authors described as PCUs, "fully-programmable" control units. Binder et al. go on to say, at page 214 of their article: "[o]f particular interest is the possibility of designing low power battery operated portable PCUs for mobile units in the ALOHANET." In describing the PCU design, Binder et al. explicitly reference Fralick et al. ("a companion paper in these proceedings"); Fralick et al. actually describe how to build one such battery-powered mobile unit. Fralick et al. also describe powering down of the transmitter, in effect, to preserve the battery ("[a]lthough the transmitter peak power is nominally 10 watts, the duty cycle will be very slow so that the transmitter will require only a few milliwatts average power"), and they also suggest the desirability of "[t]ransmit-only terminals").

U.S. Patent 4,777,488 (the "Carlman, Jr. et al.") describes a data packet communication system for use in an environment where users located at fixed units (e.g., at restaurant tables) communicate with one or more other display or controller units using a protocol exchange. While the preferred embodiment of this system involves "time slotted r.f.

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⁴ Thus, e.g., Binder et al. describe (at page 204) that under "pure ALOHA mode of operation, packets are sent by the user nodes to the [base station, called MENEHUNE] in a completely unsynchronized manner ... [and] a positive acknowledgement protocol is used for packets sent on the random-access channel." Fralick et al. illustrate the protocol in Figure 3 and describe the basic functionality in the accompanying text at pages 255-257)("If an ACK <u>is not received in a predetermined time</u>, the typical protocol dictates retransmission in a pseudo-random time interval"). Fralick et al., at page 257, emphasis supplied.

data communications", the patentees stated the invention could be implemented in a non-time slotted environment (where "collision detection might also be used"). In this patent, the units are described as battery-powered, and the packet exchange protocol explicitly describes turning on the receiver <u>only when it is needed</u>, e.g., to receive an acknowledgement, to preserve the battery. See, e.g., the discussion at Column 6, lines 4-6 that "[a]fter the message has been transmitted, the program loops back and the receiver is <u>turned on</u> to listen to determine if an acknowledgement message is received (emphasis supplied)." In the described protocol, once a given "cancel message" is received, the "microcomputer resets the power latch 33 causing the [] unit to, in effect, shut down and stop consuming power from the battery."

Thus, Carlman Jr. et al. describe (in the words of the '183 patent Summary) a "packetexchange protocol [] used for a communications link that provides reduced power dissipation at the remote unit by activating the receive function for only a short time, rather than requiring the remote unit to receive or "listen" at all times." ('183 patent, Column 2, lines 61-66).

Selective activation of a mobile unit's receiver to preserve the unit's battery, was not unique to Carlman, Jr. et al. Indeed, paging devices operated in this manner long before the filing date of the subject patent. Oda et al. and Akahori et al. are representative of such paging devices.

Thus, by June 1989, the filing date of the '183 patent, the basic packet-exchange protocol ("transmitting from the remote at a time selected by the remote, then receiving only at a fixed time window") was how the ALOHANET worked, and there were numerous descriptions and teachings about use of low power-drain, transmit-only terminals in this very packet-based communications system. Selective operation of a mobile device receiver to

LAW OFFICES OF ItacPherson, Kwok, Chen & Heid LLt 1762 Technology Dr , Suite 226 San Jose, CA 95110 (408)-392-9520 FAX (408)-392-9262 conserve a battery was suggested by Binder et al. ("[o]f particular interest is the possibility of designing low power battery operated portable PCUs for mobile units in the ALOHANET.") and it was taught explicitly by such references as Carlman Jr., Oda et al. and Akahori et al. Of course, by this time carrier sense multiple access (CSMA) also was a well-developed art. *Except for CSMA (see the discussion at the '183 patent, Column 6, line 24), the '183 patent prosecution did not reflect any of this prior art.* Accordingly, a substantial new question of patentability exists with respect to each of claims 1, 16, 21, 35, 40 and 41, as there was nothing novel or unobvious about the subject matter in any such claim.

For purposes of this reexamination request, the various terms used throughout the claims should be afforded their broadest reasonable interpretation consistent with the specification. *Manual of Patent Examining Procedure* at §2111. The *Markman* ruling in the Proxim litigation is consistent with this approach.⁵

1. The cited art raises a substantial new question of patentability of each subject claim either under 102(e), 102(e)/103, or 103(a), as indicated by the following representative claim charts⁶:

<u>U.S. Patent No. 5,029,183</u>	Applicability of the new art
1. A method of transmitting data packets from one of a plurality of remote terminal units to a base station, comprising the steps of:	The ALOHANET, as described by Kleinrock et al., involved a method of transmitting data packets from remote terminals to a central computer through an intermediary device. Binder et al. describe the specific implementation of the ALOHANET in 1975, which includes a plurality of remote

⁵ The Requester does not admit that the *Markman* ruling is correct in all respects.

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⁶ One of ordinary skill in the art would be motivated to combine Binder et al. or Fralick et al. and Kleinrock et al., as all three references describe the ALOHANET, either theoretically or as actually implemented. Any of Carlman, Jr., Oda et al. or Akahori et al. likewise can be combined given Binder et al.'s express suggestion of the desirability of "designing low power battery operated portable PCU's for mobile units in the ALOHANET (emphasis supplied)." As noted above, these secondary references specifically describe turning a mobile unit receiver on only when it is needed, i.e., only when the receiver is expected (by the nature of the protocol itself) to receive or to be in a position to receive a given signal. All three references do so to prevent power drain and to conserve the battery.

	terminals communicated with a central computer through an intermediary, which was called MENEHUNE. In this system, as described in Binder et al., remote units communicated with the central computer over a random access channel, using the intermediary in effect as the base station. The <i>Markman</i> ruling in the Proxim litigation interpreted "base station" to mean "a unit that transfers data between a remote terminal unit and a central computer, but which cannot initiate data communications with a remote terminal unit." Whether or not this construction is adopted by the Office, the machine called MENEHUNE in the Binder et al. reference meets this limitation because, with respect to the random access channel, that machine could not initiate communications to any remote terminal unit. Binder et al. further explicitly stated that it would be of "particular interess [to design] low power battery operated portable PCU's for mobile units in the AHOLANET." In the <i>Markman</i> ruling, the "remote terminal units" were interpreted as wireless mobile units, precisely as Binder et al. had described.
(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;	In the ALOHANET, as described by Kleinrock et al., remote users transmit "any time they desire." Binder et al. describes that the remote ALOHANET units operate "in a completely unsynchronized manner" – i.e., without time slots, and Fralick et al. describes the use of "transmit-only terminals" that work in the manner recited in this clause. In this respect, the <i>Markman</i> interpretation requires "a time period selected by the remote terminal unit during which the remote terminal unit transmits a data packet." Any ALOHANET terminal operates in this manner. In the alternative embodiment of Carlman, Jr. et al., a non- time slot based approach is suggested and, obviously, users (restaurant customers) would only operate the remote units if and when needed.
(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.	According to the Markman ruling, a "second time period occurring only a fixed time delay after said first time period" means "a time period which occurs a fixed time after the firs period." In the ALOHANET, as described by Kleinrock et al a packet exchange protocol assumes "a positive acknowledgement scheme; if within some specified delay (an appropriate time-out period) after the transmission of a packet, a user does not receive an acknowledgement," the packet transmission is considered unsuccessful. Kleinrock's "time-out period" meets the claimed invention precisely. Any of Carlman, Jr., Oda et al. or Akahori et al. describe turning on a mobile unit receiver only when it is needed, i.e., only when the receiver is expected (by the nature of the protocol itself) to be receiving (or to be in a position to receive) a given signal. Of course, the claim itself is silent about powering a receiver up or down.
	The requirement that the "second time period being the same for at least some of [the] units" was described by the Applicant (in the Amendment, filed October 19, 1990) as merely a requirement that the units did not operate in a time-

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al.
According to the <i>Markman</i> ruling, this step means that the remote terminal unit "senses the medium before transmitting to determine whether the medium is in use." This is conventional CSMA, as described in Kleinrock et al, in Binder et al., or in the '183 specification itself as "admitted prior art."
The ALOHANET, as described by Kleinrock et al., involved a method of transmitting data packets from remote terminals to a central computer through an intermediary device. Binder et al. describe the specific implementation of the ALOHANET in 1975, which includes a plurality of remote terminals communicated with a central computer through an intermediary, which was called MENEHUNE. In this system, as described in Binder et al., remote units communicated with the central computer over a random access channel, using the intermediary in effect as the second station. Binder et al. further explicitly stated that it would be of "particular interest [to design] low power battery operated portable PCU's for mobile units in the AHOLANET." In the <i>Markman</i> ruling, the "remote terminal units" were interpreted as wireless mobile units, precisely as Binder et al. had described.
In the ALOHANET, as described by Kleinrock et al., remote users transmit "any time they desire." Binder et al. describes that the remote ALOHANET units operate "in a completely unsynchronized manner" – i.e., without time slots, and Fralick et al. describes the use of "transmit-only terminals" that work in the manner recited in this clause. In this respect, the <i>Markman</i> interpretation requires "a time period selected by the remote terminal unit during which the remote terminal unit transmits a data packet." Any ALOHANET terminal operates in this manner.
Binder et al. and Fralick et al. each describe a remote unit in a station that includes the recited transmitter.
 Binder et al. and Fralick et al. each describe that the remote unit in the station also includes the recited receiver. In the ALOHANET, as described by Kleinrock et al, a packet exchange protocol assumes "a positive acknowledgement scheme; if within some specified delay (an appropriate time-out period) after the transmission of a packet, a user does not receive an acknowledgement," the packet transmission is considered unsuccessful. Kleinrock's "time-out period" meets the claimed invention of a "second time period occurring only in a time window referenced to [the] first time period by a fixed delay," precisely as described. Any of Carlman, Jr., Oda et al. or Akahori et al. describe

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⁷ In particular, the Applicant's counsel argued that the "claims recite that the fixed time or the time window is the same for all remote units, which would not be possible with the system of the reference where time slots are dictated to separate in time the transmissions from remote units."

	turning on a mobile unit receiver only when it is needed, i.e., only when the receiver is expected (by the nature of the protocol itself) to be receiving a given signal. Of course, the claim itself is silent about powering a receiver up or down. The requirement that the "fixed delay being the same for all said plurality of first stations" was described by the Applicant (in the Amendment, filed October 19, 1990) as merely a requirement that the units did not operate in a time- slot based manner, which is how the ALOHANET worked as taught by either Kleinrock et al., Binder et al., or Fralick et al. The claim does not specify how many units comprise a "plurality of first stations" thus any subset of remote units in the ALOHANET as described by Kleinrock et al. and/or Binder et ail./Fralich et al. meet this limitation.
35. A system according to claim 21 wherein the transmitter at said first station receives prior to transmitting said data packet to detect transmission by other stations.	According to the <i>Markman</i> ruling, this function means that the remote terminal unit "senses the medium before transmitting to determine whether the medium is in use." This is conventional CSMA, as described in Kleinrock et al, in Binder et al., or in the '183 specification itself as "admitted prior art."
40. A method of data transmission between a plurality of terminals and a base station, comprising the steps of:	The ALOHANET, as described by Kleinrock et al., involved a method of transmitting data packets from remote terminals to a central computer through an intermediary device. Binder et al. describe the specific implementation of the ALOHANET in 1975, which includes a plurality of remote terminals communicated with a central computer through an intermediary, which was called MENEHUNE. In this system, as described in Binder et al., remote units communicated with the central computer over a random access channel, using the intermediary in effect as the base station. The <i>Markman</i> ruling in the Proxim litigation interpreted "base station" to mean "a unit that transfers data between a remote terminal unit and a central computer, but which cannot initiate data communications with a remote terminal unit." Whether or not this construction is adopted by the Office, the machine called MENEHUNE in the Binder et al. reference meets this limitation because, with respect to the random access channel, that machine could not initiate communications to any remote terminal unit. Binder et al. further explicitly stated that it would be of "particular interest [to design] low power battery operated portable PCU's for mobile units in the AHOLANET." In the <i>Markman</i> ruling, the "remote terminal units" were interpreted as wireless mobile units, precisely as Binder et al. had described.
(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals;	In the ALOHANET, as described by Kleinrock et al., remote users transmit "any time they desire." Binder et al. describes that the remote ALOHANET units operate "in a completely unsynchronized manner" – i.e., without time slots, and Fralick et al. describes the use of "transmit-only terminals" that work in the manner recited in this clause. In this respect, the <i>Markman</i> interpretation requires "a time period selected by the remote terminal unit during which the remote terminal unit transmits a data packet." Any ALOHANET terminal operates in this manner.

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	As described in Binder et al., ALOHANET used a two- frequency configuration with a single destination in the random access channel (the MENEHUNE), and a single source in a broadcast channel (the MENEHUNE). According to the authors, "only the sender's address is required in the random access channel and only the destination address in the broadcast channel, which in both cases is the user address." The claim requires that the transmitted data packet and the acknowledgement include an "identification," which is the user address.
(b) receiving said transmitted data packet at said base station and transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal, and	In the ALOHANET, as described by Kleinrock et al, a packe exchange protocol assumes "a positive acknowledgement scheme; if within some specified delay (an appropriate time- out period) after the transmission of a packet, a user does not receive an acknowledgement," the packet transmission is considered unsuccessful. Kleinrock's "time-out period" meets the claimed invention of a "predetermined time window," precisely as described.
	Any of Carlman, Jr., Oda et al. or Akahori et al. further describe turning on a mobile unit receiver only when it is needed, i.e., only when the receiver is expected (by the nature of the protocol itself) to be receiving a given signal. Of course, the claim itself is silent about powering a receiver up or down.
	The requirement that the "predetermined time window being the same for all said terminals" was described by the Applicant (in the Amendment, filed October 19, 1990) as merely a requirement that the units did not operate in a time- slot based manner, which is how the ALOHANET worked as taught by either Kleinrock et al., Binder et al., or Fralick et al. The claim does not specify how many units comprise a "plurality of said terminals" thus any subset of remote units in the ALOHANET as described by Kleinrock et al. and/or Binder et ail./Fralich et al. meet this limitation.
(c) receiving said acknowledgement at said one terminal during said predetermined time window.	See the above discussion of the pure ALOHA data packet protocol. Any of Carlman, Jr., Oda et al. or Akahori et al. further describe turning on a mobile unit receiver only when it is needed, i.e., only when the receiver is expected (by the nature of the protocol itself) to be receiving a given signal. Of course, the claim itself is silent about powering a receiver up or down.
41. A method according to claim 40 including the step of first receiving at said one terminal to detect transmission by another of said plurality of terminals, before transmitting said data packet.	According to the <i>Markman</i> ruling, this function means that the remote terminal unit "senses the medium before transmitting to determine whether the medium is in use." This is conventional CSMA, as described in Kleinrock et al, in Binder et al., or in the '183 specification itself as "admitted prior art."

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CONCLUSION

For the reasons stated above, the Examiner was not provided or was not otherwise aware of the well-known prior art evidencing (a) "transmitting from the remote <u>at a time</u> <u>selected by the remote, then receiving only at a fixed time window</u>" as originally implemented in the ALOHANET and as described in the Kleinrock et al. paper, (b) the use of (or suggestion to design) battery-powered mobile devices in the ALOHANET as described in Binder et al. and/or Fralick et al., or (c) teachings such as any of Carlman, Jr. et al., Oda et al. or Akahori et al., which described selective activation of a mobile device receiver (in the words of the '183 patent Summary) "for only a short time, rather than requiring the remote unit to receive or 'listen' <u>at all times</u> (emphasis supplied)."

Thus, a substantial new question of patentability exists, as none of the subject matter set forth in claims 1, 16, 21, 35 and 40-41 currently satisfies the requirements of Title 35, U.S.C. § 100 *et seq*.

A Notice to this effect is requested.

If the Examiner has any question regarding the above, the Examiner is respectfully requested to telephone the undersigned at 408-392-9250.

EXPRESS MAIL LABEL NO.:

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Respéctfully submitted.

Edward C. Kwok Reg. No. 33,938

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					July 6, 2005		Unassigned
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Initial	AA	Number 4,479,261	Date 23 Oct. 1984	Name Oda et al.	Class	Subclass	If Appropriate
	AB	+	19 Jan. 1988				
<u> </u>	AD	4,720,710		Akahori et al.	,		
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	AM	Binder et al. "ALOHA Packet Broadcasting: A Retrospect" AFIPS National Computer Conference Proceedings Volume 44 (May 19-22, 1975), pages 203-215.					
	AN	Fralick et al. "Digital Terminals for Packet Broadcasting" AFIPS National Computer Conference (NCC) Proceedings Volume 44 (May 19-22, 1975), pages 253-262.					
· · · ·	AO	Kleinrock et al. "Packet Switching in Radio Channels: Part I – Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics," IEEE Transactions on Communications, Volume 23, No. 12, December 1975, pages 1400-1416.					
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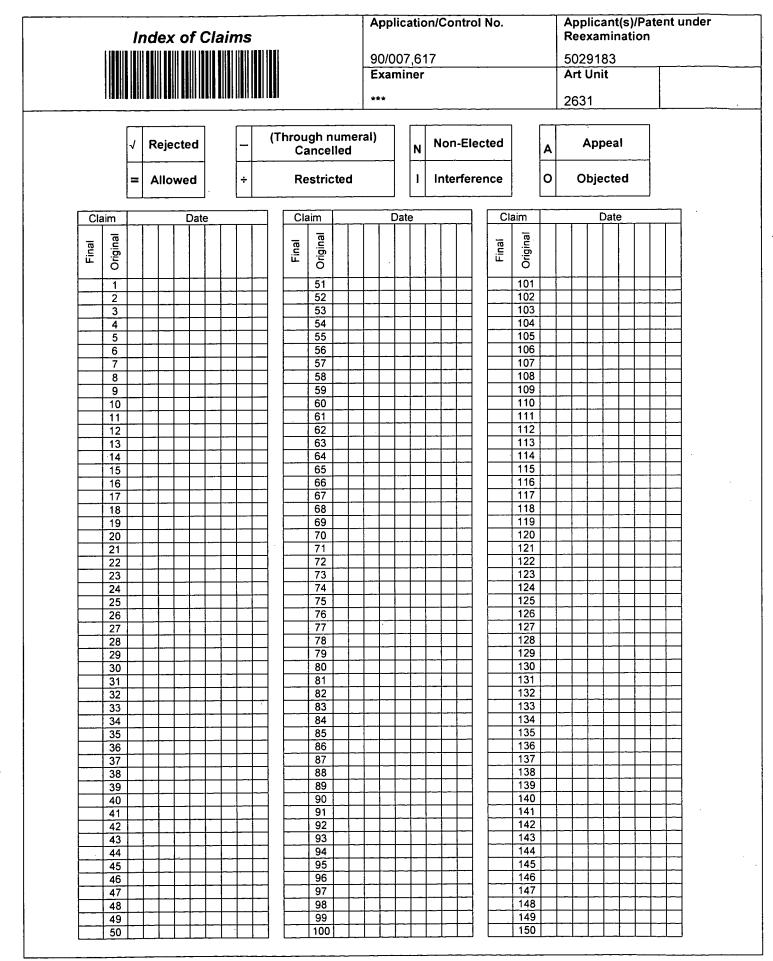
Bib Data Sheet

CONFIRMATION NO. 7501

SERIAL NUMBER 90/007,617	FILING OR 371(c) DATE 07/06/2005 RULE	CLASS 375		P ART UNIT 2631		ATTORNEY DOCKET NO. -16056-REUS
Symbol Techn Edward C. Kw Edward C. Kw ** CONTINUING DA This applicatio	dence Not Provided; ologies Inc.(Owner), Hot ok(3rd. Pty. Req.), San J ok, San Jose, CA TA ***********************************	Jose, CA; .∗ 2 06/29/1989 PAT 5,02	9,183			
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ADDRESS John G. Graham ARNOLD WHITE & I P.O. Box 4433 Houston ,TX 77210	DURKEE					
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Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination		
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Page 2400 fazer No. 1

Reexamination	Application/Control No. 90/007,617	Applicant(s)/Patent Under Reexamination 5029183
	Certificate Date	Certificate Number

Requester	Correspondence Address:	Patent Owner	🛛 Third Party	
	ON KWOK CHEN & HEID LLP logy Drive, Suite 226			

	(examiner initials)	(date)
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Application/Control No.	Applicant(s)/Patent under Reexamination
90/007,617	5029183
Examiner	Art Unit
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SEARCH NOTES (INCLUDING SEARCH STRATEGY)					
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Patent Assignment Abstract of Title

Total Assignmer Application #: 0		Filing Dt: 06/29/1	.989 Patent #: <u>50</u>	<u>029183</u> Issue Dt:	07/02/1991			
PCT #: N	IONE		Publication #: N	ONE Pub Dt:				
Inventor: L	AROY TYM	ES						
Title: P	Title: PACKET DATA COMMUNICATION NETWORK							
Assignment: 1								
Reel/Frame:	005098/0	973 Received:	Recorded: 06/29/1989	Mailed: NONE	Pages: 1			
Conveyance:	ASSIGNM	ENT OF ASSIGNORS	INTEREST.					
Assignor:	TYMES, LA	AROY		Exec Dt: 06/27/198	9			
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	HOUSTON	, TX 77210						
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Reel/Frame:	<u>016116/0</u>	203 Received: 01/06/2005	Recorded: 01/05/2005	Mailed: 06/10/2005	Pages: 83			
Conveyance:	SECURITY	INTEREST (SEE DO	CUMENT FOR DETAILS).		·			
Assignor:	SYMBOL T	ECHNOLOGIES, INC	<u>~</u>	Exec Dt: 12/29/200	4			
Assignee:	<u>JPMORGA</u>	N CHASE BANK, N.A	<u>\.</u>					
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	WASHING	TON, DC 20005						

Search Results as of: 7/8/2005 4:26:19 P.M.

If you have any comments or questions concerning the data displayed, contact OPR / Assignments at 703-308-9723 Web interface last modified: Oct. 5, 2002

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	I	United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov
REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/007,617	07/06/2005	5029183

Edward C. Kwok MACPHERSON KWOK CHEN & HEID LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

Date Mailed: 07/11/2005

CONFIRMATION NO. 7501

OC00000016487585

NOTICE OF REEXAMINATION REQUEST FILING DATE

(Third Party Requester)

Requester is hereby notified that the filing date of the request for reexamination is 07/06/2005, the date the required fee of \$2,520 was received.

A decision on the request for reexamination will be mailed within three months from the filing date of the request for reexamination. (See 37 CFR 1.515(a)).

A copy of the Notice is being sent to the person identified by the requester as the patent owner. Further patent owner correspondence will be the latest attorney or agent of record in the patent file. (See 37 CFR 1.33). Any paper filed should include a reference to the present request for reexamination (by Reexamination Control Number).

cc: Patent Owner

John G. Graham ARNOLD WHITE & DURKEE P.O. Box 4433 Houston, TX 77210

Office of Patent Legal Administration Central Reexamination Unit 571-272-7705

PART 3 - OFFICE COPY

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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/007,617	07/06/2005	5029183

John G. Graham ARNOLD WHITE & DURKEE P.O. Box 4433 Houston, TX 77210

REEXAM ASSIGNMENT NOTICE

Date Mailed: 07/11/2005

CONFIRMATION NO. 7501

NOTICE OF ASSIGNMENT OF REEXAMINATION REQUEST

The above-identified request for reexamination has been assigned to Art Unit 2631. All future correspondence to the proceeding should be identified by the control number listed above and directed to the assigned Art Unit.

A copy of this Notice is being sent to the latest attorney or agent of record in the patent file or to all owners of record. (See 37 CFR 1.33(c)). If the addressee is not, or does not represent, the current owner, he or she is required to forward all communications regarding this proceeding to the current owner(s). An attorney or agent receiving this communication who does not represent the current owner(s) may wish to seek to withdraw pursuant to 37 CFR 1.36 in order to avoid receiving future communications. If the address of the current owner(s) is unknown, this communication should be returned within the request to withdraw pursuant to Section 1.36.

cc: Third Party Requester(if any)

Edward C. Kwok MACPHERSON KWOK CHEN & HEID LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

Office of Patent Legal Administration Central Reexamination Unit 571-272-7705

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			UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alcrandria, Virginia 22313-1450 www.uspto.gov	
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	M-16056-REUS	7501
7590 09/16/2005			EXAMINER	
	ITE & DURKEE			
P.O. Box 4433 Houston, TX 77210		ART UNIT	PAPER NUMBER	

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

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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Edward C. Kwok MacPherson Kwok Chen & Heid LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/007,617.

PATENT NO. 5029183.

ART UNIT 2662.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

	Control No.	Patent Under Ree	xamination			
Order Granting / Denying Request For	90/007,617 Examiner	Art Unit	· · · · ·			
Ex Parte Reexamination	Hanh Nguyen	2662				
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The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
The request for <i>ex parte</i> reexamination filed <u>06 July 2005</u> has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.						
Attachments: a) PTO-892, b)⊠ PT	O-1449, c)∏ Other: _					
1. The request for <i>ex parte</i> reexamination is GRANTED.						
RESPONSE TIMES ARE SET AS FOLLOWS:						
For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).						
For Requester's Reply (optional): TWO MONTHS from the date of service of any timely filed Patent Owner's Statement (37 CFR 1.535). NO EXTENSION OF THIS TIME PERIOD IS PERMITTED. If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.						
2. The request for <i>ex parte</i> reexamination is	DENIED.					
This decision is not appealable (35 U.S.C. 303(c)). Requester may seek review by petition to the Commissioner under 37 CFR 1.181 within ONE MONTH from the mailing date of this communication (37 CFR 1.515(c)). EXTENSION OF TIME TO FILE SUCH A PETITION UNDER 37 CFR 1.181 ARE AVAILABLE ONLY BY PETITION TO SUSPEND OR WAIVE THE REGULATIONS UNDER 37 CFR 1.183.						
In due course, a refund under 37 CFR 1.26 (c) will be made to requester:						
a) D by Treasury check or,						
b) 🔲 by credit to Deposit Account No, or						
c) \Box by credit to a credit card account, ur	nless otherwise notified (35 U.	S.C. 303(c)).				

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Reexamination

A substantial new question of patentability affecting claims 1-84 of United States Patent Number 5,029,183 is raised by the request for *ex parte* reexamination.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

It is agreed that a consideration of each cited references taken either individually or in combination with one or more cited references raises a substantial new question of patentability as to claims 1-84 of the 5,029,183 patent. As pointed out in the request, each of the cited references explicitly or implicitly teaches: (i) an Aloha method that permits mobile users to transmit packets to a central computer at any time they desire; (ii) turn on the receiver of mobile user only when it is needed to receive an acknowledgement from the central computer, assuming a positive acknowledgement is received at the mobile user in the manner recited in claims 1, 21, 40 of the 5,029,183 patent; and (iii) a well-known Carrier Sense Multiple Access (CSMA) technique of attempting to avoid collisions by listening to another user 's transmission in the manner recited in claims 16, 35, 41 of the 5,029,183 patent.

The teachings (i), (ii) and (iii) were not present in the prosecution of the application which became the 5,029,183 patent. Further, there is a substantial likelihood that a reasonable examiner would consider these teachings, taken collectively, to be important in deciding whether or not the claims are patentable. Accordingly, each of the cited references above raises new

Application/Control Number: 90/007,617 Art Unit: 2662

question of patentability as to claims 1-84, which question has not been decided in a previous examination of the 5,029,183 patent.

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 5,029,183 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8 AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. 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).

Page 3

Application/Control Number: 90/007,617 Art Unit: 2662

Hanh Nguyen

AND CN September 14, 2005

HANH NGUYEN PRIMARY EXAMINER

HASSAN KIZOU SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

KENNETH WIEDER SPECIAL PROGRAM EXAMINER TECHNOLOGY CENTER 2600

H6/05

U.S. Department of Commerce, Patent and Trademark Office Atty. Docket No. Re-Exa	am Con No.:
M-16056-RE US Unassig	gned
INFORMATION DISCLOSURE STATEMENT BY APPLICANT Applicant(s)	
(Use several sheets if necessary) LaRoy Tymes	
Re-Exam Date: Group	2662
	good Nguyon, H
U.S. Patent Documents	
	iling Date Appropriate
AA 4,479,261 23 Oct. 1984 Oda et al.	
AB 4,720,710 19 Jan. 1988 Akahori et al.	
AC 4,777,488 11 Oct. 1988 Carlman, Jr. et al.	
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
AL Memorandum Order; Symbol Technologies, Inc. v Proxim Incorporated; C.A. No. 01-801-SLI 7.	R; pages 1-
AM Binder et al. "ALOHA Packet Broadcasting: A Retrospect" AFIPS National Computer Conference Proceedings Volume 44 (May 19-22, 1975), pages 203-215.	ence
AN Fralick et al. "Digital Terminals for Packet Broadcasting" AFIPS National Computer Conference Proceedings Volume 44 (May 19-22, 1975), pages 253-262.	nce (NCC)
HT AO Kleinrock et al. "Packet Switching in Radio Channels: Part I – Carrier Sense Multiple-Access Their Throughput-Delay Characteristics," IEEE Transactions on Communications, Volume 23 December 1975, pages 1400-1416.	
AP	·
Examiner KINSWIG Date Considered 919/05	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line thro citation if not in conformance and not considered. Include copy of this form with your communication to applicant.	ough

PTO/SB/82 (04-05) Approved for use through 11/30/2005. OMB 0651-0035 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.						
Onder the Paperwork Reduction Act of 1995, no persons are required to re	Application Number	ess it displays a valid OMB control number.				
REVOCATION OF POWER OF	Filing Date	90/007,617				
ATTORNEY WITH	First Named Inventor	July 6, 2005 L. Tymes				
NEW POWER OF ATTORNEY	Art Unit	Unassigned				
AND	Examiner Name					
CHANGE OF CORRESPONDENCE ADDRESS	Attorney Docket Number	Unassigned 2319.065REX0				
	,	2515.005KEA0				
I hereby revoke all previous powers of attorney giver	n in the above-identified a	pplication.				
A Power of Attorney is submitted herewith.						
OR						
X I hereby appoint the practitioners associated with t	he Customer Number:	26111				
X The address associated with Customer Number:	X The address associated with					
OR						
Firm or Individual Name						
Address						
City	State	Zip				
Country						
Telephone	Email					
I am the:						
Applicant/Inventor.						
Assignee of record of the entire interest. See 37 C	CFR 3.71.					
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)						
6IGNATURE of Applicant or Assignee of Record						

 Signature

 Signature

 Name
 Aaron Bernstein, VP & Deputy General Counsel Intellectual Property

 Date
 Image: Colspan="2">Image: Colspan="2">Counsel Intellectual Property

 NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

X •Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Und	er the Paperwork Reduction Act of 1995, n	persons are required to re		PTO/SB/96 (12-05 ved for use through 07/31/2006. OMB 0651-003 ark Office; U.S. DEPARTMENT OF COMMERCE on unless it displays a valid OMB control number
		STATEMENT UND	ER 37 CFR 3.73(b)	2319.065REX0
Applicar	t/Patent Owner: <u>L. Tymes</u>			
Applicati	ion No./Patent No./Control No.:	90/007,617	Filed/Issue Date:	July 6, 2005
Entitled:		Packet Data Co	mmunication Netwo	ork
	Symbol Technologi	es, Inc.	. a	corporation
states th	(Name of Assignee)	· · · · · · · · · · · · · · · · · · ·	(Type of Assignee: corporation,	partnership, university, government agency, etc.)
	e assignee of the entire right, title,	and interest; or		
2. 🗌 an (Ti	assignee of less than the entire r he extent (by percentage) of its or	ight, title and interest wnership interest is	%)	
in the pa	tent application/patent identified a	bove by virtue of eith	er:	
	assignment from the inventor(s) he United States Patent and Trad ginal assignment is attached.	of the patent applicati emark Office at Reel	on/patent identified above 016116, Frame	. The assignment was recorded 0203, or a true copy of the
OR		of the patent applicat	ion/patent identified above	e, to the current assignee as follows:
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2	2. From: The document was recorded	To:		
	Reel, Fran	ne	_, or for which a copy the	reof is attached.
3	B. From:	To		
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	Additional documents in the chair	n of title are listed on a	a supplemental sheet.	
INOT	red by 37 CFR 3.73(b)(1)(i), the was, or concurrently is being, "E: A separate copy (<i>i.e.</i> , a true or Division in accordance with 37 CF 302.08]	Submitted for recor	dation pursuant to 37 Cl	FR 3.11 ,
The unde	rsigned (whose title is supplied be	elow) is authorized to	act on behalf of the assig	nee.
	Che 15	est_		10 Feb06
	Signa	ature		Date
	Aaron E	ernstein		(631) 738-4055
	Printed or Ty		·	Telephone Number
	VP & Deputy General Co		Property	
	Titl	-		
his collection JSPTO to proceed to provide the provident of the provident	on of information is required by 37 CFR 3 rocess) an application. Confidentiality is g cluding gathering, preparing, and submittin	.73(b). The information is overned by 35 U.S.C. 122	required to obtain or retain a be and 37 CFR 1.11 and 1.14. This	nefit by the public which is to file (and by the is collection is estimated to take 12 minutes to

USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

495336_1.DOC If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt					
EFS ID:	1004983				
Application Number:	90007617				
Confirmation Number:	7501				
Title of Invention:	PACKET DATA COMMUNICATION NETWORK				
First Named Inventor:	5029183				
Correspondence Address:	John G. Graham ARNOLD WHITE & DURKEE P.O. Box 4433 - Houston TX 77210 US - -				
Filer:	Michele A. Cimbala				
Filer Authorized By:					
Attorney Docket Number:	M-16056-REUS				
Receipt Date:	13-FEB-2006				
Filing Date:	06-JUL-2005				
Time Stamp:	15:03:35				
Application Type:	Utility				

Payment information:

Submitted with Payment

File Listing:

no

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part	Pages
1	Transmittal letter	2319_065REX0TL.pdf	54065	no	1
Warnings:					
2	Power of Attorney (may include Associate POA)	2319_065REX0RevofPOAan dNewPOAandChangeofCorr Adrs.pdf	47793	no	1
Warnings:		· · · · ·			
3	Transmittal letter	2319_065REX0373bStatem ent.pdf	54994	no	1
Warnings:					
		Total Files Size (in bytes):	15	6852	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.					



Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Horner Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Judith U. Kim Patrick E. Garrett Jeffrey T. Helvey Heidi L. Kraus Eldora L. Ellison Thomas C. Fiala Donald R. Banowit Peter A. Jackman Jeffrey S. Weaver Vincent L. Capuano Brian J. Del Buono Virgil Lee Beaston Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Rae Lynn P. Guest Daniel A. Klein

February 13, 2006

Jason D. Eisenberg Michael D. Specht Tracy L. Wuller Jon E. Wright LuAnne M. DeSantis Helene C. Carlson Cynthia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Nicole D. Dretar Ted J. Ebersole Laura A. Vogel Bryan S. Wade Aaron L. Schwartz Bashir M.S. Ali Shannon A. Carroll Wesley W. Jones Matthew E. Kelley Michelle K. Holoubek* Marsha A. Rose* W. Blake Coblentz* James J. Pohl* John T. Haran* Mark W. Rygiel <u>Registered Patent Agents*</u> Karen R. Markowicz Nancy J. Leith Matthew J. Dowd Katrina Yujian Pei Quach Bryan L. Skelton Robert A. Schwartzman Teresa A. Colella

Victoria S. Rutherford

Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse Christopher J. Walsh Liliana Di Nola-Baron Peter A. Socarras Jeffrey Mills Danielle L. Letting Lori Brandes

<u>Of Counsel</u> Kenneth C. Bass III Marvin C. Guthrie

*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Art Unit Unassigned

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:	U.S. Reexan	nination Patent Application
	Application	No. 90/007,617; Filed: July 6, 2005
	For:	Packet Data Communication Network
	Inventor:	L. Tymes
	Our Ref:	2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Copy of an original, executed Revocation of Power of Attorney with New Power of Attorney and Change of Correspondence Address (Form PTO/SB/82); and
- 2. Copy of an original, executed Statement Under 37 C.F.R § 3.73(b).

These documents are being submitted via EFS-web.

In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

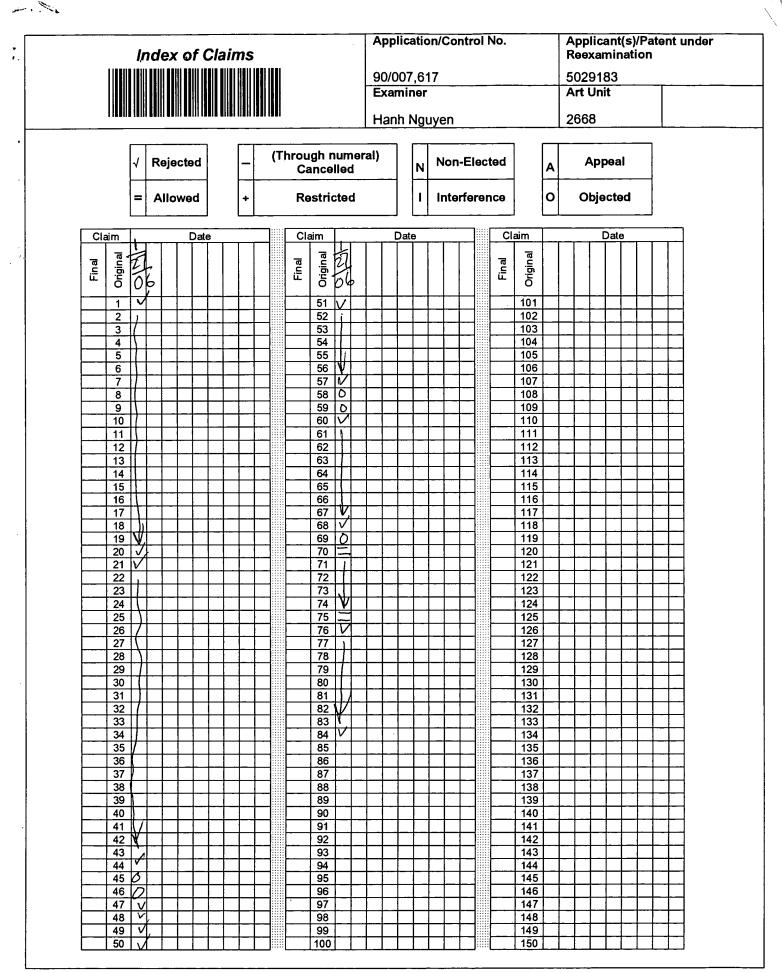
Respectfully submitted,

Kessler, Goldstein & Fox p.l.l.c.

Robert Sokohl Attorney for Applicant Registration No. 36,013

RES/srb Enclosures

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U.S. Patent and Trademark Office

Part of Paper No. 20060127



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Application/Control No.	Applicant(s)/Patent under Reexamination
90/007,617	5029183
Examiner	Art Unit
Hanh Nguyen	2668

SEARCHED						
Class	Subclass	Date	Examiner			
370	348	1/27/2006	HN			
	445					
	329					
	331					
	441					
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	448					
455	343.3					
	450					
375	141					
	147					
340	825.72					

INTERFERENCE SEARCHED								
Class Subclass Date Examine								

SEARCH NOTES (INCLUDING SEARCH STRATEGY)				
	DATE	EXMR		
East	1/27/2006	ни		

	ITED	States Patent and	TRADEN	<u>1ark Office</u>		United Sta Address: COM P.O. 1 Alexa	STATES DEP ates Patent MISSIONER Box 1450 andria, Virginia 2: Jurguo, gov	and Tra FOR PAT	2NT OF COMMERCE Idemurk Office TENTS
Bib Data Sheet								-IRM/	ATION NO. 7501
SERIAL NUME 90/007,617		FILING OR 371(c) DATE 07/06/2005 RULE	C	CLASS 375 37.0	GRO	UP AR1 - 203 1 266		D	ATTORNEY OCKET NO. -16056-REUS
 APPLICANTS 5029183, Residence Not Provided; Symbol Technologies Inc. (Owner), Houston, TX; Edward C. Kwok(3rd. Pty. Req.), San Jose, CA; Edward C. Kwok, San Jose, CA ** CONTINUING DATA **********************************									
35 USC 119 (a-d) conditions U yes no Met after STATE OR SHEETS CLAIMS CLAIMS met Allowance COUNTRY DRAWING 84 7							INDEPENDENT CLAIMS 7		
Acknowledged Examiner's Signature Initials ADDRESS John G. Graham ARNOLD WHITE & DURKEE P.O. Box 4433 Houston ,TX 77210 TITLE PACKET DATA COMMUNICATION NETWORK									
FILING FEE RECEIVED	FEES No	: Authority has been gi to charge/crefor following:	ven in P	aper 'OSIT ACCOU	NT	□ 1.1 time)	6 Fees (7 Fees (8 Fees (ner	Proce	essing Ext. of

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Page	1	of	1
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UNITED STATE	s Patent and Tradema	UNITED STAT United States Address: COMMISS PO. Box 14	Virginia 22313-1450
APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
90/007,617	07/06/2005	5029183	M-16056-REUS
26111 STERNE, KESSLER, GOLDSTEIN 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			CONFIRMATION NO: 7501

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/13/2006.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

REINHARD J EISENZOPF

2600 (571) 272-2983

OFFICE COPY

United Stat	tes Patent and Tradema		
Contraction of the second seco		United State	ATES DEPARTMENT OF COMMERCE s Patent and Trademark Office ISSIONER FOR PATENTS 1450 ia, Virginia 22313-1450 togov
APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
90/007,617	07/06/2005	5029183	M-16056-REUS
in G. Graham			
NOLD WHITE & DURKEE). Box 4433 uston, TX 77210		*0000	00000018050501*
		· ·	Date Mailed: 02/14/2
NO	TICE REGARDING CHAN	GE OF POWER OF ATTOR	NEY
s is in response to the Power	of Attorney filed 02/13/2006.		:
The Power of Attorney to you 1. Future correspondence wil	in this application has been revo I be mailed to the new address o	ked by the assignee who has inte f record(37 CFR 1.33).	rvened as provided by 37 CFF
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	<u>ed States Patent a</u>	ND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspio.gov	Trademark Office OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	M-16056-REUS	7501
	590 02/14/2006 SSLER, GOLDSTEIN &	z FOX PLLC	EXAM	INER
1100 NEW YO	ORK AVENUE, N.W. N, DC 20005		ART UNIT	PAPER NUMBER

DATE MAILED: 02/14/2006

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

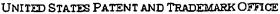
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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspro.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Edward C. Kwok MacPherson Kwok Chen & Heid LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/007,617.

PATENT NO. <u>5029183</u>.

ART UNIT 2662.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

	Control No. 90/007,617	Patent Under Reexamination 5029183					
Office Action in Ex Parte Reexamination	Examiner Hanh Nguyen	Art Unit 2668					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
a⊠ Responsive to the communication(s) filed on <u>06 July 2005</u> . b□ This action is made FINAL. c□ A statement under 37 CFR 1.530 has not been received from the patent owner.							
A shortened statutory period for response to this action is set Failure to respond within the period for response will result in certificate in accordance with this action. 37 CFR 1.550(d). If If the period for response specified above is less than thirty (s will be considered timely.	termination of the proceeding and iss EXTENSIONS OF TIME ARE GOVER	uance of an <i>ex parte</i> reexamination NED BY 37 CFR 1.550(c).					
Part I THE FOLLOWING ATTACHMENT(S) ARE PART O	F THIS ACTION:						
1. 🛛 Notice of References Cited by Examiner, PTO-6	392. 3. 🗌 Interview Summa	ary, PTO-474.					
2. 🛛 Information Disclosure Statement, PTO-1449.	4.						
Part II SUMMARY OF ACTION							
1a. 🛛 Claims <u>1-84</u> are subject to reexamination.							
1b. 🔲 Claims are not subject to reexamination.							
2. 🔲 Claims have been canceled in the preser	nt reexamination proceeding.						
3. 🛛 Claims <u>45,46,58,59 and 69-75</u> are patentable a	nd/or confirmed.						
4. 🛛 Claims <u>1-44,47-57,60-68 and 76-84</u> are rejected							
5. 🔲 Claims are objected to.							
6. 🔲 The drawings, filed on are acceptable.							
7. 🔲 The proposed drawing correction, filed on	has been (7a) approved (7b)	disapproved.					
8. 🔲 Acknowledgment is made of the priority claim u							
a)☐ All b)☐ Some* c)☐ None of the ce	rtified copies have						
1 been received.							
2 not been received.							
3 been filed in Application No							
4 been filed in reexamination Control No	<u>. </u>						
5 been received by the International Bureau	in PCT application No						
* See the attached detailed Office action for a lis	t of the certified copies not received.						
 Since the proceeding appears to be in condition matters, prosecution as to the merits is closed 11, 453 O.G. 213. 	n for issuance of an <i>ex parte</i> reexamin in accordance with the practice under	ation certificate except for formal <i>Ex parte</i> Quayle, 1935 C.D.					
10. 🔲 Other:	,						
	HNzugen	HANH NGUYEN PRIMARY EXAMINER					
cc: Requester (if third party requester)		····					
	Ex Parte Reexamination	Part of Paper No20060127					

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 5-9, 14, 16, 19-22, 25-27, 29, 30, 35, 38-40, 42, 47-49, 76-79, 81, 83 and 84 are rejected under 35 USC 102(e) as being anticipated by Koohgoli et al. (US Pat. 4,771,448).

In claims 1, 5, 21, 25, 26, 40, 47 and 76, Koohgoli et al. discloses, in fig.3, a method of transmitting data packets from one of a plurality of remote terminal units (a portable unit 16) to a base station (base station 13) comprising the steps of transmitting a data packet from the one unit to the base station during a first time period selected by the unit (portable unit 16 selects a time during which a channel is free to transmit a request message to base station 13; col.7, lines 47-57 & col.11, lines 62-67); The portable unit 16 receives an OFFER message (an ack signal) from the base station 13 during a predetermined Request Time Out (RTO)); see col.8, lines 30 (

receiving at the one unit from the base station an acknowledgement signal during a second time period occurring only a fixed time delay after the first time period, the second time period being the same for at least some of the units. Koohgoli et al. further discloses the data packet including ID of the terminal (claim 40, the request message has ID of portable unit 16; see col.7, lines 60-62); the acknowledgement signal including ID of the terminal (claim 40; the OFFER message contains IDs of terminal 16 and base station 13; see col.8, lines 20-23); and if the acknowledge signal is not received , then sending a distress packet from the remote terminal (claim 76; see fig.3, if the OFFER message fails to reach the portable unit 16, the portable unit 16 sends another request; see c ol.8, lines 32-37). In additional, each base station receiving the distress packet, sends quality of reception of the distress packet to other base stations(claim 76; each base station 13 receives the requests, checks to ensure whether the request message was received properly; see col.8, lines 1-4).

In claims 2, 22, 42 and 81, Koohgoli et al. discloses the transmitting and receiving steps are by RF signals (fig.2 shows a wireless radio signaling channel and wireless control channel; therefore, the transmitting and receiving steps are performed by RF signals).

In claim 6, the limitation of this claim has been addressed in claim 1.

In claims 7 and 27, Koohgoli et al. discloses the remote stations are hand-held data gathering units which include manual control elements (each remote unit 16 is capable of receiving/transmitting voice/ data and processing power to interpret messages on radio signaling channels and take appropriate actions, see col.6, lines 30-40).

In claims 16 and 35, Koohgoli et al. discloses the unit, prior to the transmitting, receiving the data packet to detect transmission by other like units (portable unit 16 senses the activity of uplink channel to determine if the uplink channel is free to transmit; see col.7, lines 52-57).

In claim 14, Koohgoli et al. discloses the acknowledgement signal is transmitted by a second station (see fig.3, base station sends an OFFER message to portable unit 16) which is one of a plurality of said second stations physically spaced from one another (the base station 13 as shown in fig.1, is one of plurality of other base stations 13 located in separate cells 12; see col.5, line 50 to col.6, line 30), and there are a plurality of units for each of the second station (there are many portable units 16 in each cell 12 in which the base station 16 is located).

In claims 8, 19, 29 and 38, Koohgoli et al. discloses the remote unit including bar-code reading devices (portable unit 16 is capable of scanning all downlink radio channels). See col.6, lines 30-34.

In claim 9, the limitations of this claim have been addressed in claim 18.

In claims 20, 30 and 39, Koohgoli et al. discloses the remote unit including keyboard inputs and visual display (portable unit 16 are telephone units or data modem; see col.2, lines 65; which are used in cellular network. Therefore, they have keyboard inputs and visual display).

In claims 48, 49 and 79, Koohgoli et al. discloses the terminal is responsive to the transmission from base station only during the time window (portable unit 16 receives a valid OFFER message during the time out period RTO from base station, then sends an ACK message on the uplink channel to base station 13; see col.8, lines 40-45 and 60-65).

In claims 83 and 84, the limitations of these claims have been addressed in claim 76.

In claim 77, Koohgoli et al. discloses sending a packet to the remote terminal from the designated base station to acknowledge the distress signal (base station 13 sends an OFFER message to the portable terminal 16 after receiving a second request signal from the same portable unit 16; see col.8, lines 32-40).

In claim 78, Koohgoli et al. discloses the packet is sent to the remote terminal after a

predetermined time period has elapsed since sending the distress signal (if all the OFFERs

messages fail to reach portable unit 16, the portable unit 16 times out and sends another request

which is acknowledged by the base station during the time out period; col.8, lines 33-45).

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.

Claims 3, 4, 10, 23, 24, 31, 32 and 43 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli et al..

In claims 3, 4, 23, 24, 31 and 43, Koohgoli et al.. does not disclose the RF signals is of spread spectrum direct sequence. Using RF signals in spread spectrum direct sequence is well-known in the art because each remote unit is assigned a PN code which prevent interferences between different remote units. Therefore, it would have been obvious to use RF signals in spread spectrum direct sequence in cellular system of Koohgoli et al. in order to prevent co-channel interferences.

In claim 32, the limitation of this claim has been addressed in claim 14.

Claims 10-13, 15, 17, 18, 28, 33, 34, 36, 37, 50-54, 56, 57, 60-63, 65-67, 68, 80 and 82 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli et al. in view of Carlman, Jr. et al. (US pat. 4,777,488).

In claims 15, 17, 36, 80 and 82, Koohgoli et al. does not disclose each unit is identified by a unique code, transmitted data packet includes the unique code, and the acknowledge signal also include the unique code. Carlman, Jr. et al. discloses a table unit having a transceiver. The transceiver transmits a coded signal identifying a request to a server unit (transmitted data packet includes the unique code); The transceiver receives an acknowledgement code from the server unit (the acknowledge signal also include the unique code). See Abstract and col.1, lines 55-62. Therefore, it would have been obvious to reconfigure the Ids in the request message, Offer (ACK) message of Koohgoli et al. with codes in order to protect security of the messages and to ensure that only the remote unit to which the offer message is transmitted is able to decode the offerred message.

In claim 10, the limitations of this claim has been addressed in claim 15.

In claim 11, Koohgoli et al. does not disclose the transmit packet and acknowledge signal are RF signals of direct sequence spread spectrum type. Using RF signals in spread spectrum direct sequence is well-known in the art because each remote unit is assigned a PN code which prevent interferences between different remote units. Therefore, it would have been obvious to use RF signals in spread spectrum direct sequence in cellular system of Koohgoli et al. in order to prevent co-channel interferences.

In claims 12, 13 and 33, Koohgoli et al. discloses the acknowledge signal is transmitted by a second station which is one of a plurality of like second stations (base station 13, like other base stations 13, transmits an OFFER message to portable unit 16; see col.8, lines 15-20); and each one of the second stations is coupled for communication to a central computer (In cellular system as shown in fig.1, each base station 13 is coupled to a switch 11 via land link 14; see col.7, lines 1-7).

In claims 18, 28 and 37, Koohgoli et al. does not disclose each unit includes a processor executing instructions stored in a memory, and the acknowledgement signal is first loaded to the memory and then decoded. Carlman, Jr. et al. discloses, in fig.3, a remote unit that includes a microprocessor 24 storing programs in ROM 26; col.5, lines 35-40 (a processor executing instructions stored in a memory). Therefore, it would have been obvious to one ordinary skilled in the art to have in the portable unit 16 of Koohgoli et al. a microprocessor and a memory to execute programs stored in the memory. The motivation is to perform programmed steps of transmitting packet, determining whether the transmitted packet has been acknowledged via an ACK message transmitted from the base station.

In claim 34, the limitation of this claim has been addressed in claim 36.

In claims 50 and 60, as indicated by Koohgoli et al. and Carlmen, Jr. et al. in the rejection of claims 1, 28; most of the limitations have been addressed; except that the base station encodes the data to be transmitted and the terminal unit decodes the received data. However, the Carlmen et al. discloses, in fig.4, a server comprising a transceiver 41 (base station including a transmitter and receiver); decoders 46, 48 (decoding RF signals); see col.6, lines 30-55. In addition, fig.3 discloses a remote unit comprising a transceiver 21 (RF transmitter/receiver); a memory 26 (a

memory for storing data); and a microprocessor 24 (a processor). See col.4, lines 13-25. The remote unit is activate for detecting acknowwledge signal (remote terminal includes switches S1-S4 which are actuated and power is applied momentarily; see col.5, lines 15-20). Therefore, it would have been obvious to configure the structure of base station and remote terminal of Koohgoli et al. as described in Carlmen so that the request and the acknowledge signals are received correctly.

In claims 51 and 61, the limitations of these claims have been addressed in claims 7 and 8.

In claims 52 and 62, the limitations of these claims have been addressed in claims 3, 4 and 43.

In claim 53, the limitation of this claim has been addressed in claim 13.

In claims 56 and 63, the limitations of these claims have been addressed in claims 50 and

60.

In claim 54, the limitation of this claim has been addressed in claim 1. In claim 57, the limitation of this claim has been addressed in claim 1. In claim 66, the limitation of this claim has been addressed in claim 60. In claim 65, the limitation of this claim has been addressed in claim 60. In claim 67, the limitation of this claim has been addressed in claims 16 and 35. In claim 68, the limitation of this claim has been addressed in claims 16 and 35. Claims 55 and 64 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli et al. in view of Carlman, Jr. et al. (US pat. 4,777,488), and further in view of Malcolm et al. (US pat. 4,332,027).

In claims 55 and 64, Koohgoli et al. and Carlman, Jr. et al. do not disclose the encoded RF signal including a header containing a synchronizing signals followed by a block of data signals. Malcolm et al. discloses, in fig.2, a fixed size packet containing syn code followed by a destination address (a header). The destination address is followed by a data field. See col.3, lines 5-15. Therefore, it would have been obvious to have synchronizing signal in the RF signal of Koohgoli et al. so that the request and ACK signals are transmitted and received at a desired time.

Claim 44 is rejected under 35 USC 103(a) as being unpatentable over Koohgoli et al. in view of Shiff (US pat. 4,587,661).

In claim 44, Koohgoli et al. does not disclose spread spectrum technique employs a sequence of frequency shifts between two frequencies. Shiff discloses a spread spectrum transmission between an earth station and satellite such as indicated in fig.4, a change in frequency occurs in response to a change of clock pulse rate; see col.7, lines 8-20 (a sequence of frequency shifts between two frequencies). Therefore, it would have been obvious use the frequency shift of Shiff into the Koohgoli et al. in order to provide synchronization at portable unit 16.

Patentable Subject Matter

Claims 45, 46, 58, 59 and 69-75 are patentable over the prior art. The following is a statement of reasons for the indication of patentable subject matter:

In claim 45, the prior art fails to disclose expanding a multi-byte packet to create an expanded packet, then produce in the memory an exclusive-OR of the expanded packet and a fixed PN sequence of bits.

In claim 58, the prior art fails to disclose the number of errors are transmitted to other base stations to specify the unique codes of the remote units.

In claim 69, the prior art fails to disclose the base station that decodes packet by loading detected data corresponding to the signal serially into a register and decoding bits of the register in parallel.

In claim 70, the prior art fails to disclose comparing each data string with a binary code corresponding to that (a binary code) used for generating a chipping sequence of the RF signal.

Any comments considered necessary by applicant must be submitted promptly.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Davis et al. (US Pat. 4,612,637);

Oda et al. (US pat. 4,479,261).

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan, can be reached on 571 272 3043. 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).

Hanh Nguyen

Primary Examiner

Conferees

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BRIAN NGUYEN PRIMARY EXAMINER

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Sheet 1 of 1

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT						Applicant(s)		
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Initial		Number	Date	Name	Clas	s Subclass	If Appropriate	
	AA	4,479,261	23 Oct. 1984	Oda et al.				
AIV	AB	4,720,710	19 Jan. 1988	Akahori et al.				
ATN	AC	4,777,488	11 Oct. 1988	Carlman, Jr. et a	1.			
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AN	AN			Packet Broadcasting , 1975), pages 253-2		tional Computer	Conference (NCC)	
HN	AO	Kleinrock et al. "Packet Switching in Radio Channels: Part I – Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics," IEEE Transactions on Communications, Volume 23, No. 12, December 1975, pages 1400-1416.						
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Notice of References Cited			ant(s)/Patent Under mination 83	
Notice of References Cited	Examiner	Art Unit		
	Hanh Nguyen	2668	Page 1 of 1	

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,612,637	09-1986	Davis et al.	370/348
*	в	US-4,479,261	10-1984	Oda et al.	455/343.3
*	с	US-4,777,488	10-1988	Carlman et al.	340/825.72
*	D	US-4,587,661	05-1986	Schiff, Leonard N.	375/141
*	Ε	US-4,771,448	09-1988	Koohgoli et al.	455/450
*	F	US-4,332,027	05-1982	Malcolm et al.	370/448
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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Part of Paper No. 20060127



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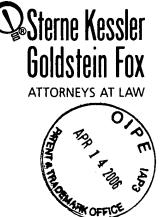
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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
90/007,617		07/06/2005	5029183	M-16056-REUS	7501
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		R, GOLDSTEIN & /enue, n.W.	FOX PLLC		
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DATE MAILED: 04/04/2006

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

Interview Summary 90007.617 5020183 Examiner Art Unit Hanh Nguyen 2016 All participants (applicant, applicant's representative, PTO personnel): (1) Hanh Nguyen (1) Hanh Nguyen (3) Robert Sokohl. (2)	<u> </u>	Application No.	Applicant(s)							
Examiner Art Unit Hanh Nguyen 2618 All participants (applicant, applicant's representative, PTO personnel): (1) (1) Hanh Nguyen (3) (2) (3) Robert Sokohl. (2) (4) Lot Gordon. Date of Interview: 04 April 2005. Type: applicant 2) applicant's representative] Exhibit show or demonstration conducted: d) Ays applicant's representative] Exhibit show or demonstration conducted: d) Mays applicant's representative] Exhibit show or demonstration conducted: d) Mays applicant's representative] Exhibit show or demonstration conducted: d) Mays applicant's representative] Exhibit show or demonstration conducted: d) Mays mass not reached. h) N/A. Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments. Applicant explained the constructions of base station and the remote unit as defined in the prosecution history. Saccification and by the district out: hat he description, if necessary, and a copy of the amendments which the examine	Intonviou Summany	90/007,617	5029183							
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Date of Interview: <u>04 April 2006</u> . Type: a) Telephonic b) Video Conference () Personal [copy given to: 1) applicant 2) applicant's representative] Exhibit shown or demonstration conducted: d) Yes e) No. If Yes, brief description: <u>Memorandom order</u> . Claim(s) discussed: <u>1</u> . Identification of prior and discussed: <u>None</u> . Agreement with respect to the claims f) was reached. g) was not reached. h) N/A. Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>Applicant explained the constructions of base station and the remote unit as defined in the prosecution history, specification and by the district court. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable, if available, must be attached. THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW. DATE, CON THE SUBSTANCE OF TH</u>	(1) <u>Hanh Nguyen</u> .	(3) <u>Robert Sokohl</u> .								
Type: a) Telephonic b) Video Conference c) Personal (copy given to: 1) applicant 2) applicant's representative] Exhibit shown or demonstration conducted: d) Yes e) No. If Yes, brief description: Memorandom order. Claim(s) discussed: 1. Identification of prior art discussed: No. Agreement with respect to the claims () was reached. g) was not reached. h) NA. Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>Applicant explained the constructions of base station and the remote unit as defined in the prosecution history, specification and by the district court. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable if available, must be attached. Also, where no copy of the amendments that would render the claims allowable if available, a summary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS INTERVIEW DATE, OR THE MALLING DATE OF THIS INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet. MEANH NGUYEN PHANH NGUYEN PHANH NGUYEN PHANH NGUYEN PHANH NGUYEN PHANH NGUYEN <</u>	(2)	(4) <u>Lori Gordon</u> .								
c) Personal [copy given to: 1) □ applicant 2) ⊠ applicant's representative] Exhibit shown or demonstration conducted: d) ⊠ Yes e) □ No. If Yes, brief description: <u>Memorandom order</u> . Claim(s) discussed: <u>1</u> . Identification of prior art discussed: <u>None</u> . Agreement with respect to the claims f) ⊠ was reached. g) □ was not reached. h) □ N/A. Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: <u>Applicant explained the constructions of base station and the remote unit as defined in the prosecution history, specification and by the district court. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable, if available, asummary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE WAILING DATE OF THE INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet. MANH NGUYEN Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.</u>	Date of Interview: <u>04 April 2006</u> .									
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Agreement with respect to the claims f) was reached. g) was not reached. h) N/A. Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant explained the constructions of base station and the remote unit as defined in the prosecution history, specification and by the district court. (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW DATE, OR THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.	Claim(s) discussed: <u>1</u> .									
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reached, or any other comments: <u>Applicant explained the constructions of base station and the remote unit as defined in the prosecution history, specification and by the district court.</u> (A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.) THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet. Examiner Note: You must sign this form unless it is an Attachment to a signed Office action. MAMH MGUYEN Examiner's gignature of required	Agreement with respect to the claims f) \square was reached. \Box)) was not reached. h) N	I/A.							
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April 14, 2006

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Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Art Unit 2616

Attn: Mail Stop Ex Parte Reexam

Re: Reexamination of U.S. Patent No. 5,029,183 Application No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: L. Tymes Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Reply to Office Action in Ex Parte Reexamination and Statement of Substance of Interview Under 37 C.F.R. §1.560;
- 2. Certification of Service on Third Party Requestor of Reply to Office Action;
- 3. Information Disclosure Statement;
- 4. Certification of Service on Third Party Requestor of Information Disclosure Statement;
- 5. A Listing of the Cited Documents on Form PTO/SB/08A (1 page);
- 6. A Listing of the Cited Documents on Form PTO/SB/08B (<u>3</u> pages);
- 7. Copies of the Cited Documents (FP1 FP3) and (NPL1 NPL25); and
- 8. One $(\underline{1})$ Return postcard.

G

Commissioner for Patents April 14, 2006 Page 2

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

TERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Applicant Registration No. 36,013

RES/LAG:smn Enclosures

521070_1.DOC

Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

- 34 -

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Hanh Nguyen Art Unit: 2616

«Ŋ,

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATION OF SERVICE OF REPLY TO OFFICE ACTION

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on April 14, 2006. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

> > Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date:

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183 (Tymes)

Confirmation No.: 7501

Art Unit: 2616

Reexam Control No.: 90/007,617

Filed: July 6, 2005

For: Packet Data Communication Network Examiner: Hanh Nguyen

Atty.Docket: 2319.065REX0

Reply to Office Action in *Ex Parte* Reexamination and Statement of Substance of Interview Under 37 C.F.R. § 1.560

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

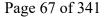
Sir:

In reply to the Office Action in Ex Parte Reexamination dated February 14, 2006,

the Patent Owner submits the following Listing of Claims and Remarks.

In compliance with 37 C.F.R. § 1.560, Applicants submit the following Statement of Substance of Interview conducted on April 4, 2006 between Examiner Hanh Nguyen and Patent Owner's representatives, Robert E. Sokohl and Lori A. Gordon.

It is not believed that extensions of time or other fees are required. However, if any fees are necessary to prevent abandonment of this application, then such fees are hereby petitioned and hereby authorized to be charged to our Deposit Account No. 19-0036.



Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Listing of the Patent Claims

A listing of the status of each claim under reexamination is provided below.

1. (original patent claim) A method of transmitting data packets from one of a plurality of remote terminal units to a base station, comprising the steps of:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

2. (original patent claim) A method according to claim 1 wherein said step of transmitting is by an RF signal, and said step of receiving includes receiving an RF signal.

3. (original patent claim) A method according to claim 2 wherein said RF signal is of the spread spectrum type.

4. (original patent claim) A method according to claim 3 wherein said spread spectrum RF signal is of the direct sequence type.

5. (original patent claim) A method according to claim 1 wherein said transmitted data packet and said acknowledge signal each include identification of said remote terminal unit.

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6. (original patent claim) A method according to claim 5 wherein said unit is one of a plurality of remote stations associated with the transmitter of said acknowledge signal.

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7. (original patent claim) A method according to claim 6 wherein said remote stations are hand-held data-gathering units which include manual control elements.

8. (original patent claim) A method according to claim 6 wherein at least some of said remote stations include bar-code reading devices.

9. (original patent claim) A method according to claim 1 wherein said stations each include a processor executing instructions stored in a memory and said data packet and said acknowledge signal are both also stored in said memory in binary format.

10. (original patent claim) A method according to claim 9 wherein said data packet is encoded by said processor executing instructions, and said acknowledge signal is decoded by said processor executing instructions.

11. (original patent claim) A method according to claim 10 wherein said transmitted data packet and said acknowledge signal are RF signals of the direct sequence spread spectrum type.

12. (original patent claim) A method according to claim 11 wherein said acknowledge signal is transmitted by a second station which is one of a plurality of like second stations, and each one of said second stations is coupled for communication to a central computer.

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13. (original patent claim) A method according to claim 12 including the step of sending data packets to said central computer from said second stations by a serial communications link.

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14. (original patent claim) A method according to claim 1 wherein said acknowledge signal is transmitted by a second station which is one of a plurality of said second stations physically spaced from one another, and there are a plurality of said units for each said second station.

15. (original patent claim) A method according to claim 14 wherein each one of said units is identified by a unique code and said transmitted data packet includes said unique code, and said acknowledge signal also includes said unique code.

16. (original patent claim) A method according to claim 1 including the step of receiving at said unit prior to said step of transmitting said data packet to detect transmission by other like units.

17. (original patent claim) A method according to claim 16 wherein there are a plurality of said units, each identified by a unique code transmitted with said data packet and with said acknowledge signal.

18. (original patent claim) A method according to claim 17 wherein said units each include a processor executing instructions stored in a memory, and said acknowledge signal is first loaded to said memory and then decoded.

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19. (original patent claim) A method according to claim 18 wherein at least some of said units include hand-held bar-code scanners or readers.

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20. (original patent claim) A method according to claim 19 wherein at least some of said units include keyboard inputs and visual displays scanned by said processor.

21. (original patent claim) A system for transmitting data packets from one of a plurality of first stations to a second station, comprising:

(a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;

(b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations.

22. (original patent claim) A system according to claim 21 wherein said transmitted data packet is sent by an RF signal, and said acknowledge signal is an RF signal.

23. (original patent claim) A system according to claim 22 wherein said RF signal is of the spread spectrum type.

24. (original patent claim) A system according to claim 23 wherein said spread spectrum RF signal is of the direct sequence type.

25. (original patent claim) A system according to claim 21 wherein said transmitted data packet includes identification of said first station, and said acknowledge signal includes identification of said first station.

26. (original patent claim) A system according to claim 25 wherein said first station is one of a plurality of remote stations associated with said second station.

27. (original patent claim) A system according to claim 26 wherein said remote stations are hand-held data-gathering units which include manual control elements.

28. (original patent claim) A system according to claim 27 wherein said units each include a processor executing instructions stored in a memory.

29. (original patent claim) A system according to claim 28 wherein at least some of said units include bar-code scanners.

30. (original patent claim) A system according to claim 29 wherein at least some of said units include keyboard inputs and visual displays.

31. (original patent claim) A system according to claim 30 wherein said transmitted data packet and said acknowledge signal are RF signals of the direct sequence spread spectrum type.

32. (original patent claim) A system according to claim 31 wherein there are a plurality of said second stations, and a plurality of said first stations for each said second station.

33. (original patent claim A system according to claim 32 wherein all of said plurality of second stations are coupled to a host station by a communication link.

34. (original patent claim) A system according to claim 33 wherein each of said second stations includes a decoder for decoding the data packet sent by a first station to produce digital data to send to said host station.

35. (original patent claim) A system according to claim 21 wherein the transmitter at said first station receives prior to transmitting said data packet to detect transmission by other stations.

36. (original patent claim) A system according to claim 35 wherein there are a plurality of said first stations, each identified by a unique code transmitted with said data packet and with said acknowledge signal.

37. (original patent claim) A system according to claim 36 wherein said first stations each include a processor executing instructions stored in a memory, and said acknowledge signal is first loaded to said memory and then decoded.

38. (original patent claim) A system according to claim 37 wherein at least some of said first stations include hand-held bar-code scanners.

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39. (original patent claim) A system according to claim 38 wherein at least some of said units include keyboard inputs and visual displays scanned by said processor.

40. (original patent claim) A method of data transmission between a plurality of terminals and a base station, comprising the steps of:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal;

(c) receiving said acknowledgement at said one terminal during said predetermined time window.

41. (original patent claim) A method according to claim 40 including the step of first receiving at said one terminal to detect transmission by another of said plurality of terminals, before transmitting said data packet.

42. (original patent claim) A method according to claim 40 wherein said transmitting is by wireless RF.

43. (original patent claim) A method according to claim 42 wherein said RF is modulated by the spread spectrum technique.

44. (original patent claim) A method according to claim 43 wherein said spread spectrum technique employs a sequence of frequency shifts between two frequencies.

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45. (original patent claim) A method according to claim 44 including the steps of forming said data packet in a memory by expanding a multi-byte packet to create an expanded packet then producing in said memory an exclusive-OR of said expanded packet and a fixed pseudorandom sequence of bits.

46. (original patent claim) A method according to claim 45 wherein said multi-byte packet includes the results of reading a bar code symbol.

47. (original patent claim) A method according to claim 40 wherein said acknowledgement includes data to be transferred from said base station to said one terminal.

48. (original patent claim) A method according to claim 40 wherein said one terminal is responsive to transmission from said base station only during said time window.

49. (original patent claim) A method according to claim 48 wherein said time window has a starting point occurring a fixed time from the beginning of said transmitted data packet.

50. (original patent claim) A data communication system comprising:

(a) a host computer including a data communication input/output port;

(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at

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least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;

(c) a plurality of remote units, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window, each of the remote units having:

(i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window.

51. (original patent claim) A system according to claim 50 wherein at least some of said remote units are hand-held bar code readers and said local data source of each such remote unit produces decoded bar code data for loading to said memory under control of said processor.

52. (original patent claim) A system according to claim 50 wherein said RF signals are spread spectrum modulated signals of the direct sequence type.

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53. (original patent claim) A system according to claim 50 wherein said communication link is a serial data link by which data packets are sent from base station to host computer or base station to base station, or sent from host computer to base station.

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54. (original patent claim) A system according to claim 50 wherein said base stations receive said encoded RF signal packets only from a predetermined subset of said plurality of said remote units.

55. (original patent claim) A system according to claim 54 wherein said encoded RF signals include a header containing synchronizing signals followed by a block of data signals.

56. (original patent claim) A system according to claim 50 wherein each one of said remote units is identified by a unique identifying code contained in said encoded RF signals transmitted by the remote unit, and wherein said base stations are responsive to said unique identifying code to allow only one of the base stations to send said RF acknowledge signals to each separate remote unit.

57. (original patent claim) A system according to claim 56 wherein each one of said base stations is responsive to all of the encoded RF signals from all of the remote units within range, and detects the number of errors occurring in reception from each one of the remote units in said encoded RF signals.

58. (original patent claim) A system according to claim 57 wherein a representation of said number of errors is transmitted to other of said base stations via said communication link to specify the unique codes of remote units each base station is to be responsive to by sending said RF acknowledge signals, said information being derived from said representation of number of errors.

59. (original patent claim) A system according to claim 58 wherein at least some of . said remote units are hand-held bar code readers.

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60. (original patent claim) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet.

61. (original patent claim) A system according to claim 60 wherein said remote units are hand-held bar code readers or the like and said data source of each remote unit produces decoded bar code data.

62. (original patent claim) A system according to claim 60 wherein said RF signals are spread spectrum modulated signals of the direct sequence type.

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63. (original patent claim) A system according to claim 60 wherein each said base station receives said encoded RF signal packets from a plurality of said remote units, and each RF signal packet includes a unique identifying code for a remote unit.

64. (original patent claim) A system according to claim 60 wherein said encoded RF signals include a header containing synchronizing signals followed by a block of data signals.

65. (original patent claim) A system according to claim 64 wherein each one of said remote units is identified by a unique identifying code contained in said header of said encoded RF signal packets transmitted by the remote unit, and wherein each said base station is responsive to said unique identifying code for only predetermined ones of said plurality of remote units.

66. (original patent claim) A system according to claim 60 wherein said RF transmitter/receiver in said remote unit is activated by said processor for detecting said RF acknowledge packet only during a fixed time window following transmission of said encoded RF signal packet.

67. (original patent claim) A system according to claim 66 wherein said RF transmitter/receiver in a remote unit sends said RF signal packet only after receiving to

detect any other RF signal from another remote unit which may be present.

68. (original patent claim) A system according to claim 67 wherein said base station decodes said RF signal packet while said RF signal packet is being received, and said remote unit decodes said RF acknowledge signal after said RF acknowledge signal has been received by accessing said memory via said processor.

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69. (original patent claim) A system according to claim 68 wherein said base station decodes said RF signal packet by loading detected data corresponding to the signal serially into a register and decoding bits of said register in parallel.

70. (original patent claim) A method of receiving a direct sequence spread spectrum RF signal having a given chip rate, comprising the steps of:

(a) detecting the RF signal to produce an output correlated with modulation of the RF signal;

(b) sampling said output at a multiple of said chip rate to produce a plurality of separate time-shifted data strings each at said chip rate;

(c) comparing each of said data strings with a binary code corresponding to that used for generating a chipping sequence of said RF signal.

71. (original patent claim) A method according to claim 70 including the step of storing said data strings in memory and wherein said step of comparing is by accessing said memory by a processor after said RF signal has been received.

Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

72. (original patent claim) A method according to claim 70 including the step of loading all of said data strings into a shift register and wherein said step of comparing is by decoding bits of said shift register while said RF signal is being received.

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73. (original patent claim) A method according to claim 71 wherein said steps are performed by a remote, hand-held, battery-operated unit.

74. (original patent claim) A method according to claim 73 wherein said RF signal is a packet of known maximum length, and said packet starts with a synchronizing signal.

75. (original patent claim) A method according to claim 74 wherein said steps of detecting, sampling and comparing are performed only in a time window established by an RF transmission from said unit.

76. (original patent claim) A method of operating a packet communications system, comprising the steps of:

(a) sending a data packet from a remote terminal to a base station and waiting to receive an acknowledgement from the base station;

(b) if an acknowledgement is not received, then sending a distress packet from said remote terminal;

(c) receiving said distress packet at a plurality of base stations, and, at each one of said base stations, sending a message to other of said base stations indicating the identity of said remote terminal and the quality of reception of said distress packet;

(d) at a base station, comparing said messages to select one of said base stations to be designated for communication with said remote terminal.

77. (original patent claim) A method according to claim 76 including the step of sending a packet to said remote terminal from said designated base station to acknowledge said distress signal.

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78. (original patent claim) A method according to claim 77 wherein said packet is sent to said remote terminal after a predetermined time period has elapsed since said step of sending said distress signal.

79. (original patent claim) A method according to claim 77 wherein said remote terminal is responsive to said packet from said designated base station only during a fixed time window.

80. (original patent claim) A method according to claim 77 wherein said data packet, said distress packet and said acknowledge packet all contain an identifying code for said remote terminal.

81. (original patent claim) A method according to claim 76 wherein said steps of sending are by RF transmission.

82. (original patent claim) A method according to claim 81 wherein said RF transmission employs spread spectrum modulation.

83. (original patent claim) A method according to claim 76 wherein only one of said base stations sends acknowledgement packets to said remote terminal.

84. (original patent claim) A method according to claim 83 wherein there are a plurality of said remote terminals.

Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Remarks

Claims 1-84 are currently pending in the reexamination proceeding of U.S. Patent No. 5,029,183 ("the '183 patent") with claims 1, 21, 40, 50, 60, 70, and 76 being independent claims. Based on the following remarks, the Patent Owner respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. Statement of Substance of Interview

The Patent Owner thanks Examiner Nguyen for the courtesy extended to their representatives, Robert E. Sokohl and Lori A. Gordon, in the interview held on April 4, 2006.

During that interview, the Patent Owner's representatives explained the required construction of the claim term "base station" according to the prosecution history and specification. Patent Owner's representatives further explained that this required construction is in complete agreement with the claim construction by the Honorable Chief Judge Sue L. Robinson in the Symbol Technologies, Inc. v. Proxim, Inc. litigation, Civil Action No. 1:01-cv-00801-SLR (District Court for the District of Delaware, July 30, 2003). Finally, the Patent Owner's representatives explained that the cited art fails to disclose, teach, or suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

II. Overview of the '183 Patent

As explained in the specification of the '183 patent, a major problem in WLAN protocols prior to 1989 (when the application for the '183 patent was filed) was that they required the remote terminal units be "addressable at any time, i.e., always activated, so the requirements for power are dictated by this feature." ('183 patent, col. 1, lines 48-50). Because remote terminal units are designed to be mobile, they usually do not have an unlimited power source, and therefore, "battery drain ... required either large, heavy batteries, or frequent recharging, or both." ('183 patent, col. 1, lines 30-31)

Recognizing that "prior systems of this type [were] too costly and otherwise unsuitable for the present purposes [i.e., a WLAN as of 1989]," the '183 claims novel systems and methods that minimize power consumption for battery-powered remote terminal units while still providing excellent data throughput. ('183 patent, col. 12, lines 10-15, 22-23; col. 2, lines 41-50). The "ability of the remote unit 15 to schedule events and communicate with the base station at times of its own choosing" is a key feature for minimizing power consumption of a remote terminal unit. In other words, while a base station may operate with a remote unit whose radio is always activated (an active mode of operation), it also has the ability to operate with a remote unit that turns its radio off to minimize power consumption (hereinafter referred to as a power saving mode of operation), wherein all data communications between that power saving remote terminal unit and the base station take place at the initiative of the remote terminal unit; the base station cannot initiate data communications with a remote terminal unit. The remote terminal unit <u>itself</u> dictates when it will "wake-up" to transmit or receive. (*See* '183 patent, col. 9, lines 6-8)("the RF transmission and reception is under control of the remote unit rather than being schedule by a higher level device such as the base station or the host computer").

II. Base Station

As discussed by the Federal Circuit in *Phillips v. AWH Corp.*, a patentee can depart from the plain and ordinary meaning of a claim term in two circumstances: (1) when the patentee has acted as his own lexicographer or (2) when the patentee has clearly limited the scope of the invention through a disclaimer in the specification or prosecution history. 415 F.3d 1303, 1316-17 (Fed. Cir. 2005). In this case, both of these circumstances are present.

A. The Specification Of The '183 Patent Clearly, Deliberately, And Precisely Defines A Special Definition For The Term "Base Station"

It is a well-established axiom in patent law that a patentee is free to be his or her own lexicographer, and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings. *Hormone Research Found., Inc. v. Genentech, Inc.,* 904 F.2d 1558, 1563 (Fed. Cir. 1990). The specification can also act to bind a Patentee to a narrower definition of a term than the extrinsic evidence might support. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001)* ("Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question."). When giving a claim term

special definition differing from or inconsistent with its ordinary meaning, the patentee must define the claim term with reasonable clarity, deliberateness, and precision so as to give one of ordinary skill in the art notice of the change. *In re Paulsen*, 30 F. 3d 1475, 1480 (Fed. Cir. 1994).

The specification of the '183 patent clearly, precisely, and deliberately gives the term "base station" a special definition which differs from its ordinary meaning. Consistently throughout the specification, the term base station describes a unit which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption. For example, the specification states:

The base stations 12, 13, and 14 *cannot initiate* an exchange of FIG. 2, or initiate any other such transmission to the remote units 15, but instead *must wait* until a packet 17 is received from the remote unit 15 for which this base station has a message waiting ('183 patent, col. 6, lines 3 - 9)(emphasis added)

This remote unit need not be concerned about receiving any further messages from a base station unit the remote unit is ready. The remote unit 15 manages or schedules its own packet communication operations, instead of being a slave of the host or base stations. ('183 patent, col. 13, lines 25-29)

In this protocol, the central station *cannot initiate* a packet transmission to a remote unit, but instead *must wait* until the remote unit has sent a transmitted packet, then the central station can reply in the rigid time window. ('183 patent, col. 2, line 61 - col. 3, line 2)

Thus, the Patent Owner has acted as their own lexicographer and set out a special

definition of the term "base station."

B. The Prosecution History Further Establishes The Special Definition of the Term "Base Station"

It is also a well-settled law that a patentee may establish a special meaning for a claim term by way of statements in the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F. 3d 1576, 1582 (Fed. Cir. 1996). As stated by the Federal Circuit, the prosecution history can act to inform whether "an inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Philips*, 415 F. 3d at 1317 (citing *Vitronics*, 90 F. 3d at 1582-83).

In an Information Disclosure Statement filed during prosecution of the '183 patent, the Patent Owner distinguished the claimed invention over four cited references by explaining that the references did not teach a system having a power saving mode of operation in which a base station cannot initiate data communications. Specifically, the Patent Owner stated:

> The Sidhu et al patent 4,689,786 shows a local area network of the Ethernet type using collision sense, multiple access techniques ... In contrast, the applicant's system is concerned with battery life, so the remote stations can receive only after they have initiated an exchange; *a base station cannot initiate a message exchange with a remote station*. (Supplemental Information Disclosure Statement filed March 26, 1991, p. 2)(emphasis added)

> The O'Sullivan patent 4,697,281 discloses a method of transmitting data using a modem and a cellular telephone system ... The cellular transceivers 12 and 18 are not disclosed to be responsive only in the manner applicant claims, however. Instead, any cellular transceiver can receive from the central station, and can transmit to the central station, at any time. (Id.)

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The Toyonaga et al patent 4,689,785 discloses a data transmission system in which a number of stations A, B, C are connected by a bus line BL ... The system differs from applicant's in that any station can receive at any time, rather than remote stations only receiving after transmitting, and a base station that cannot initiate transmission to a remote. (Id.)(emphasis added)

The Malcolm et al patent 4,332,027 discloses a contentiontype network using collision detect ... The patent does not disclose a system *in which a base station cannot send a message to a remote unless it has received a transmitted packet.* (Id.)(emphasis added).

As described in the specification, limiting initiation of wireless data packet exchange

to a remote terminal unit provides important power savings benefits. ('183 patent, col. 2, line 61-col. 3, line 2). In response to an Office Action issued during prosecution of the '183 patent, the Patent Owner distinguished the claimed invention from an applied reference (Waggener) by explaining that the cited reference did not teach a power saving mode of operation:

The remote units need not be receiving and decoding data at all times (as is true in the Waggener reference) but instead can be idle (for power saving purposes) except when they send, then receive in a fixed window (Amendment dated October 16, 1990 at p. 6)

Based on the foregoing statements, the prosecution history of the '183 patent unequivocally establishes the special definition of "base station" set out by the Patent Owner.

C. Conclusion

As clearly, deliberately, and precisely defined by the Patent Owner in the specification and prosecution history, the term "base station" means a unit that transfers data with a remote terminal unit, but which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption.

Furthermore, the claim construction ruling by the Honorable Chief Judge Sue L. Robinson in the Symbol Technologies, Inc. v. Proxim, Inc. litigation is in complete agreement with the special definition of the term "base station" set out by the Patent Owner in the specification and prosecution history. Specifically, Chief Judge Robinson stated:

> Consistent with the specification and prosecution history, the term "base station" shall mean "a unit that transfers data between a remote terminal unit and a central computer, but which cannot initiate data communications with a remote terminal unit." Symbol Technologies, Inc. v. Proxim, Inc., Civil Action No. 1:01-cv-00801-SLR, p. 2 (District Court for the District of Delaware, July 30, 2003) (Memorandum Order) (emphasis added)

Chief Judge Robison explicitly held that an accused device that includes a power save mode

of operation falls within the scope of the claims. Specifically, Chief Judge Robinson stated:

A system claim is directly infringed if the accused products meet each limitation of the asserted system claims. The question you must answer in connection with the asserted claims *is whether the accused products, in their power save mode, meet each limitation of such claims*. Symbol Technologies, Inc. v. Proxim, Inc., Civil Action No. 1:01-cv-00801-SLR, pp. 3-4 (District Court for the District of Delaware, July 30, 2003)(Trial Transcript, p. 1208, lines 5-10)(emphasis added) Accordingly, the Patent Owner's statements herein should not be interpreted to preclude a device having both an active mode of operation (i.e., a base station can initiate data communications with a remote terminal) and a power saving mode of operation (i.e., a base station cannot initiate data communications with a remote terminal) from falling within the scope of the claims.

Note that although the claim construction by Chief Judge Robinson includes the term "central computer," Chief Judge Robinson stated at trial:

Anyway, I did want to note with respect to the central computer, as I thought about it, you never know how claim construction is going to play out in the trial, to tell you the truth. And as I thought about it after I had made my decision and gave -- it was being copied and everything else -- I through that probably the more legally correct answer to the question, I went through all the claims and, obviously, there is not mention of a host computer and central computer in any of the claims, that I should have taken it out of the construction for base station but, because of the way this played out, I added a claim construction of a term that is not in any of the claims. (Trial Transcript, p. 1092)

Thus, a "central computer" is not a necessary component of the definition for "base station."

III.Second Station

Independent claim 21 uses the term "second station." Independent claim 21 recites a system "for transmitting data packets from one of a plurality of first stations to a second station" comprising "a transmitter in said one first station for transmitting a data packet from said one first station to the second station" and "a receiver in said one first station for receiving an acknowledge signal from the second station."

It is clear from the language of claim 21 and the specification that the term "second station" means a "base station." The claim construction ruling by the Honorable Chief Judge Sue L. Robinson in the Symbol Technologies, Inc. v. Proxim, Inc. litigation is also in agreement with this definition. Symbol Technologies, Inc. v. Proxim, Inc., Civil Action No. 1:01-cv-00801-SLR (District Court for the District of Delaware, July 30, 2003)(Memorandum Order)("Consistent with the specification and claim language, the term 'second station' shall mean a 'base station' as defined above")

IV. Claim Rejections

In the Office Action, the Examiner rejected the claims, as described below, by applying Koohgoli, *et al.*, U.S. Patent 4,771,448 (Koohgoli) alone or in combination with Carlman, Jr., *et al*, U.S. Patent No. 4,777,488 (Carlman), Carlman and Malcolm, et al, U.S. Patent No. 4,332,027 (Malcolm), and Shiff, U.S. Patent No. 4,587,661 (Shiff).

The Patent Owner notes that the Koohgoli, Carlman, Malcolm, and Shiff references cited in the Office Action are merely cumulative to the references cited and applied by the Examiner during prosecution of the '183 patent. Specifically, in the Office Action dated October 11, 1990, the Examiner applied U.S. Patent No. 4,829,540 to Waggener, et al (Waggener) and U.S. Patent No. 4,247,908 to Lockhart, Jr., et al (Lockhart). In the reply to the October 11, 1990 Office Action, Applicants distinguished the claimed invention by explaining that neither the Waggener nor Lockhart references taught or suggested a system having a power saving mode of operation. Similarly, as explained below, the Koohgoli, Carlman, Malcolm, and Shiff references applied in the present office action do not teach or

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suggest a power saving mode of operation in which the base station cannot initiate data communications with a remote terminal unit. Thus, the applied Koohgoli, Carlman, Malcolm, and Shiff references are merely cumulative to the references applied during prosecution of the '183 patent. The claims therefore remain patentable for the same reasons put forth in the original prosecution of the '183 patent.

A. Rejection Under §102(e) Over Koohgoli, et al.

In the Office Action, claims 1, 2, 5-9, 14, 16, 19-22, 25-27, 29, 30, 35, 38-40, 42, 47-49, 76-79, 81, 83 and 84 were rejected under 35 U.S.C. § 102(e) as being anticipated by Koohgoli, *et al.*, U.S. Patent 4,771,448 (Koohgoli). The Patent Owner respectfully traverses this rejection.

For a prior art reference to anticipate the claimed invention, it must disclose each and every element as set forth in the claim. *See Finnigan Corp. v. United States Int'l Trade Comm'n*, 180 F.3d 1354, 1365-66 (Fed. Cir. 1999). The requirement of strict identity between the claim and the prior art reference, is not met if a single element or limitation required by the claim is missing from the prior art source. *See, Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716 (Fed. Cir. 1984).

Koohgoli does not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal as is required by the recitation of base station in independent claims 1, 40, and 76 and the recitation of second station in independent claim 21.

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For at least these reasons, independent Original Patent Claims 1, 21, 40, and 76 are patentable over Koohgoli. Claims 2, 5-9, 14, 16, 19, and 20 depend from claim 1. Claims 22, 25-27, 29, 30, 35, 38, and 39 depend from claim 21. Claims 42 and 47-49 depend from claim 40 and claims 77-79, 81, 83, and 84 depend from claim 76. For at least these reasons and further in view of their own features, dependent claims 2, 5-9, 14, 16, 19, 20, 22, 25-27, 29, 30, 35, 38, 39, 42, 47-49, 77-79, 81, 83, and 84 are patentable over Koohgoli.

B. Rejection Under §103 Over Koohgoli in view of Carlman, Jr, et al

In the Office Action, claims 10-13, 15, 17, 18, 28, 33, 34, 36, 37, 50-54, 56, 57, 60-63, 65-67, 68, 80, and 82 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Carlman, Jr., *et al*, U.S. Patent No. 4,777,488 (Carlman). The Patent Owner respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, three criteria must be met. First, some motivation or suggestion must exist in the reference or in the knowledge generally available to one of ordinary skill in the art to modify the reference. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991). Second, the reference must reveal a reasonable expectation of success. *Id.* Finally, the reference must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981 (CCPA 1974).

The combination of Koohgoli and Carlman does not teach or suggest teach and every element of independent claims 50 and 60. Independent claims 50 and 60 are distinguished from Koohgoli for the reasons set forth above. Carlman adds nothing to Koohgoli to overcome the deficiencies of Koohgoli described above, since like Koohgoli, Carlman does

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not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

For at least these reasons, independent claims 50 and 60 are patentable over the combination of Koohgoli and Carlman. Claims 51-54, 56 and 57 are dependent from independent claim 50 and claims 61-63 and 65-68 are dependent from independent claim 60. For at least these reasons and further in view of their own features, dependent claims 51-54, 56, 57, 61-63, and 65-68 are patentable over the combination of Koohgoli and Carlman.

Claims 10-13, 15, 17, and 18 depend from independent claim 1, claims 28, 33, 34, 36, and 37 depend from independent claim 21, and claims 80 and 82 depend from claim 76. As discussed above, Carlman adds nothing to Koohgoli that overcomes the deficiencies of Koohgoli relative to claims 1, 21, and 76. For at least the foregoing reasons, and further in view of their own features, claims 10-13, 15, 17, 18, 28, 33, 34, 36, 37, 80 and 82 are patentable over the combination of Koohgoli and Carlman.

C. Rejection Under §103 Over Koohgoli

In the Office Action, claims 3, 4, 10, 23, 24, 31, 32, and 43 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli. The Patent Owner respectfully traverse this rejection.

Claims 3, 4, and 10 depend from independent claim 1. Claims 23, 24, 31, and 32 depend from independent claim 21 and claim 43 depends from independent claim 40. As discussed above, Koohgoli does not teach or suggest each and every element of independent

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Original Patent Claims 1, 21, and 40. For at least these reasons, and further in view of their own features, claims 3, 4, 10, 23, 24, 31, 32, and 43 are patentable over Koohgoli.

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D. Rejection Under §103 Over Koohgoli in view of Carlman, Jr, et al and further in view of Malcolm

In the Office Action, claims 55 and 64 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Carlman and further in view of Malcolm, et al, U.S. Patent No. 4,332,027 (Malcolm). The Patent Owner respectfully traverses this rejection.

Claim 55 depends from claim 50 and claim 64 depends from claim 60. Independent claims 50 and 60 are distinguished from the combination Koohgoli and Carlman for the reasons set forth above. Malcolm adds nothing to the combination of Koohgoli and Carlman to overcome the deficiencies of the combination described above. Like Koohgoli and Carlman, Malcolm does not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

For at least these reasons and further in view of their own features, dependent claims 55 and 64 are patentable over the combination of Koohgoli, Carlman, and Malcolm.

E. Rejection Under §103 Over Koohgoli and Shiff

In the Office Action, claim 44 was rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Shiff, U.S. Patent No. 4,587,661 (Shiff). The Patent Owner respectfully traverses this rejection.

Claim 44 depends from claim 40. Independent claim 40 is distinguished from the combination Koohgoli for the reasons set forth above. Shiff adds nothing to Koohgoli to

overcome the deficiencies of Koohgoli described above. Like Koohgoli, Shiff does not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

For at least these reasons and further in view of its own features, dependent claim 44 is patentable over the combination of Koohgoli and Shiff.

E. Other Matters

Applicants note that the Summary of Action indicated that dependent claim 41 was rejected in the Office Action. However, the Office Action did not include a specific rejection for dependent claim 41. Based on the foregoing remarks, Patent Owner submits that dependent claim 41 is patentable over Koohgoli alone or in combination with any of Carlman, Malcolm, or Shiff.

V. Patentable Subject Matter

The Patent Owner acknowledges with appreciation the Examiner's indication that claims 45, 46, 58, 59, and 69-75 are patentable over the prior art.

VI. Related Proceedings

Claims 1, 16, 21, 35, and 40-41 of the '183 patent were the subject of prior litigation in the United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Proxim, Incorporated*, Civil Action No. 1:01-cv-00801-SLR. The Proxim litigation was settled following a jury verdict finding infringement by Proxim.

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The '183 patent is currently asserted in litigation pending in the United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Intermec Technologies Corporation*, Civil Action No. 1:05-cv-00147-SLR.

The '183 patent was also previously asserted in two additional litigations in United States District Court for the District of Delaware: *Symbol Technologies, Inc. v. Hand Held Products,* Civil Action No. 1:03-cv-00102, filed January 21, 2003 and *Symbol Technologies, Inc. v. YDI Wireless Inc., et al*, Civil Action No. 1:05-cv-00755, filed October 28, 2005. Both litigations ended in settlement.

VII. Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. The Patent Owner therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. The Patent Owner believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present reexamination proceeding is in condition for a Notice of Intent to Issue a Reexamination Certificate. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: April 14, 2006

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: L. Tymes Appl. No.: 90/007,617 Filed: July 6, 2005 For: Packet Data Communication

Network

Confirmation No.: 7501 Art Unit: 2616 Examiner: Hanh Nguyen Atty. Docket: 2319.065REX0

Information Disclosure Statement

Mail Stop Ex Parte Reexam

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

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Listed on accompanying Forms PTO-1449 and PTO-SB08 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.555 and 1.98.

Applicant has listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Copies of documents NPL1-NPL25 and FP1-FP3 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached IDS Forms are submitted.

Document FP1 (EP 0075310) appears to describe a telephone exchange with coded signal verification. An English language abstract of document FP1 is enclosed as document NPL23.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this reexamination proceeding that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl Attorney for Applicant Registration No. 36,013

Date: April 14, 2006

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Atty. Dkt. No. 2319.065REX0

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L. Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Hanh Nguyen Art Unit: 2616

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATION OF SERVICE OF INFORMATION DISCLOSURE STATEMENT

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on April 14, 2006. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

> > Respectfully submitted,

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Atty. Dkt. No. 2319.065REX0

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Equivalent of Form PTO/SB/08A (07-05) Approved for use through 07/31/2006. U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute (for form	1449/PT	С	Complete	if Known
				Application Number	90/007,617
INFOF	RMA	ΓΙΟΝ	DISCLOSURE	Filing Date	July 6, 2005
STATEMENT BY APPLICANT (Use as many sheets as necessary)				First Named Inventor	L. Tymes
				Art Unit	2616
				Examiner Name	Hanh Nguyen
Sheet	1	of	1	Attorney Docket Number	2319.065REX0

			U.S. PATENT DO	DCUMENTS	
Examiner Initials	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages
		Number-Kind Code ^{2 (If Known)}			or Relevant Figures Appea
	USI	3,251,034	05/10/1966	GOODE, et al.	
	US2	3,959,589	05/25/1976	von ROESGEN, et al.	
_	US3	4,022,973	05/10/1977	STACKHOUSE, et al.	
	US4	4,197,500	04/08/1980	KLEIN, et al.	
	US5	4,418,277	11/29/1983	TREMMEL, et al.	
	US6	4,460,120	07/17/1984	SHEPARD, et al.	
	US7	4,477,809	10/16/1984	BOSE	
	US8	4,661,902	04/28/1987	HOCHSPRUNG, et al.	
	US9	4,673,805	06/16/1987	SHEPARD, et al.	
	US10	4,704,517	11/03/1987	CAMPISI, et al.	
	US11	4,736,095	04/05/1988	SHEPARD, et al.	
	US12	4,758,717	07/19/1988	SHEPARD, et al.	
	US13	4,792,947	12/20/1988	TAKIYASU, et al.	
	US14	4,807,222	02/21/1989	AMITAY	
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	US18	4,928,096	05/22/1990	LEONARDO, et al.	
	US19	4,933,953	06/12/1990	YAGI	
	US20	4,995,053	02/19/1991	SIMPSON, et al.	
	US21	5,006,996	04/09/1991	NAKAMURA, et al.	
	US22	5,010,241	04/23/1991	BUTTERWORTH	
	US23	5,046,066	09/03/1991	MESSENGER	
	US24				
	US25		1		

		FC	REIGN PATENT DO	DCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			Relevant Passages or Relevant Figures Appear	T ⁶
	FP1	EP 0075310	03/30/1983	Ulrich HEYLAND, et al.		
	FP2	EP 0 131 663	01/23/1985	Takashi OKADA, et al.		
	FP3	WO 88/04496	06/16/1988	Allyson REED, et al.		
	FP4					

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Examiner	Date	
Signature	Considered	

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. • Applicant is to place a check mark here if English language Translation is attached.

English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If your need assistance in completing the form call 1.800-PTO-9199 (1 800-786 9199) and select option 2 To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. Page 103 of 341

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Substitute for	form 1449/	рто		Complete if Known		
				Application Number	90/007,617	_
INFORM	IATIO	N DIS	CLOSURE	Filing Date	July 6, 2005	
STATEN	MENT I	BY AP	PLICANT	First Named Inventor	L. Tymes	
			is necessary)	Art Unit	2616	_
				Examiner Name	Hanh Nguyen	
Sheet	1	of	3	Attorney Docket Number	2319.065REX0	

		NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T ²		
	NPL1	Leonard KLEINROCK, et al., "Packet Switching in Radio Channels: Part I - Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics", IEEE Transactions on Communications, Vol. Com-23., No. 12, December 1975, pp. 1400-1416.			
	NPL2	B.S. TSYBAKOV, et al., "Packet Transmission in Radio Networks", Reprinted with permission from Problemy Peredacti Informaisii, vol. 21, no. 1, pp. 80-101, Jan March 1985, pp. 330-341.			
	NPL3	Norman ABRAMSON, "The Throughput of Packet Broadcasting Channels", IEEE Transactions on Communication, January 1977, pp. 117-128.			
	NPL4	J.M. WOZENCRAFT, et al., "Coding for Two-Way Channels", Research Laboratory of Electronics and Lincoln Laboratory, Massachusetts Institute of Technology, pp. 11-25.			
	NPL5	Simon S. LAM, et al., "Packet Switching in a Multiaccess Broadcast Channel: Dynamic Control Procedures", Transactions on Communications, Vol. Com - 23, No. 9, September 1975, pp. 891-904.			
	NPL6	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.			
-	NPL7	J.J. SPILKER, Jr. Ph.D., "Digital Communications by Satellite", 1977, pp. 449-450, 452-453 and 468.			
	NPL8	John M. WOZENCRAFT, et al., "Coding For Two-Way Channels", Technical Report 383, January 3, 1961, pp. 1-16.			
	NPL9	Lawrence G. ROBERTS, "Extensions of Packet Communication Technology to a Hand Held Personal Terminal", Spring Joint Computer Conference, 1972, pp. 295-298.			
	NPL10	Mario TOKORO, et al., "Acknowledging Ethernet", pp. 1-6.			
Examiner Signature		Date Considered	<u> </u>		

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Substitute for form	1449/PT	0		Co	Complete if Known		
				Application Number	90/007,617		
INFORMA'	ΓΙΟΝ	DIS	CLOSURE	Filing Date	July 6, 2005		
STATEME	NT BY		PLICANT	First Named Inventor	L. Tymes		
(Use	as many .	sheets a	is necessary)	Art Unit	2616		
				Examiner Name	Hanh Nguyen		
Sheet	2	of	3	Attorney Docket Number	2319.065REX0		

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published					
	NPL11	Robert E. KAHN, et al., "Advances in Packet Radio Technology", Proceeding of the IEEE, Volume 66, Number 11, pp. 1468-1496.					
	NPL12	R. BINDER, et al., "ALOHA Packet Broadcasting - A Retrospect", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19 - 22, 1975, pp. 203-215.					
•	NPL13	Norman ABRAMSON, "The ALOHA SYSTEM - Another Alternative for Computer Communications", AFIPS Conference Proceedings, Vol. 37, 1970 Fall Joint Computer Conference, Nov. 17 - 19, 1970, pp. 281-285.					
	NPL14	Richard BINDER, et al., "The Alohanet Menehune - Version 11", Sponsored by Advanced Research Projects Agency, ARPA Order No. 1956, September 1974, pp 1-55.					
	NPL15	Andrew S. TANENBAUM "Computer Networks" 2 nd Ed., Ch. 3, 1988, pp., 182- 193.					
	NPL16	"Digital Terminals for Packet Broadcasting", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 254-261.					
	NPL17	MSI PRT Portable Radio Terminal, 2 pages.					
	NPL18	Norman ABRAMSON, "Packet Switching with Satellites", AFIPS Conference Proceedings, 1973 National Computer Conference and Exposition, Volume 42, June 4-8, 1973, pp. 695-702.					
	NPL19	Leonard KLEINROCK, et al., "Random Access Techniques for Data Transmission Over Packet-Switched Radio Channels", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 187- 201.					
	NPL20 The Vectran VR1100 System: Your Link to Productivity, 11 pages.						
Examiner Signature		Date Considered					

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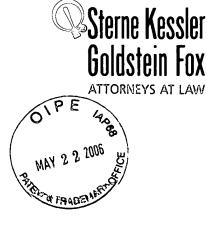
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				Application Number	90/007,617	
INFORM	IATION	DISC	CLOSURE	Filing Date	July 6, 2005	
STATEN	AENT B	Y AP	PLICANT	First Named Inventor	L. Tymes	
	(Use as many sheets as necessary)			Art Unit	2616	
				Examiner Name	Hanh Nguyen	
Sheet	3	of	3	Attorney Docket Number	2319.065REX0	

<u> </u>	· · · · ·	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
1	NPL21	Memorandum Order, Symbol Technologies, Inc. v. Proxim Incorporated, CA No. 01-801-SLR, July 30, 2003, pp. 1-7.	
	NPL22	Trial Transcript, Volume E, Symbol Technologies, Inc. V. Proxim Incorporated, C.A. No. 01-801-SLR, September 12, 2003, pp. 1055, 1056, 1092, 1208.	
	NPL23	English Abstract of EP0075310A: Circuit Arrangement for Telecommunication Exchanges, Especially Telephone Exchanges, with Devices for Securing the Transmission of Coded Signals.	
	NPL24	J.S.J. DAKA, et al., "A High Performance Broadcast File Transfer Protocol", SIGCOMM '88 Symposium, Communications Architectures & Protocols, 1988, pp. 274-281.	
	NPL25	S. CHOW, et al., "A Spread Spectrum Modem for Reliable Data Transmission in the High Frequency Band", Second Conference on HF Communication Systems and Techniques, February 15-17, 1982, pp. 125-130.	
	NPL26		
	NPL27		
	NPL28		
	NPL29		

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May 22, 2006

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<u>Of Counsel</u> Edward J. Kessler Kenneth C. Bass III Marvin C. Guthrie

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WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Art Unit 2616

Attn: Mail Stop Ex Parte Reexam

Re: Reexamination of U.S. Patent No. 5,029,183 Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: L. Tymes Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Supplemental Information Disclosure Statement;
- 2. Certification of Service on Third Party Requestor of Supplemental Information Disclosure Statement;
- 3. A Listing of the Cited Documents on Form PTO/SB/08A (1 page);
- 4. A Listing of the Cited Document on Form PTO/SB/08B (<u>1</u> page);
- 5. Copies of the Cited Documents (FP4 FP10) and (NPL26-32); and
- 6. One $(\underline{1})$ Return postcard.

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Commissioner for Patents May 22, 2006 Page 2

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It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Applicant Registration No. 36,013

RES/LAG:smn Enclosures

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L. Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Hanh Nguyen Art Unit: 2616

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

<u>CERTIFICATION OF SERVICE OF SUPPLEMENTAL INFORMATION</u> <u>DISCLOSURE STATEMENT</u>

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on May 22, 2006. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

> > Respectfully submitted,

Ressler, Goldstein & Fox p.l.l.c.

Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date: <u>May 22, 2006</u>

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reexam of U.S. Patent No.: 5,029,183
(TYMES)
Control No.: 90/007,617
Filed: July 6, 2005
For: Packet Data Communication Network

Confirmation No.: 7501 Art Unit: 2616 Examiner: Hanh Nguyen Atty. Docket: 2319.065REX0

Supplemental Information Disclosure Statement

Mail Stop Ex Parte Reexam

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO/SB08a and PTO/SB08b are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.555 and 1.98.

Applicant has listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Copies of documents FP4-FP10 and NPL26-NPL32 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached IDS Forms are submitted.

Document FP4 (DE 3304451) appears to describe a method and device for the bidirectional transmission of information between a stationary master station and a plurality of mobile outstations. A certified translation of document FP4 is enclosed as document NPL27.

Document FP6 (JP 53-108310) appears to describe an extended spectrum communication system and radio receiver. An English language translation of document FP6 is enclosed as document NPL28.

Document FP7 (JP 55-136733) appears to describe a mobile message control system. An English language translation of document FP7 is enclosed as document NPL29.

Document FP8 (JP 61-071738) appears to describe a data transmission system. An English language translation of document FP8 is enclosed as document NPL30.

Document FP9 (JP 61-270930) appears to describe a wireless transmission system. An English language translation of document FP9 is enclosed as document NPL31.

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Document FP10 (JP 63-198438) appears to describe a radio data communication system. An English language translation of document FP10 is enclosed as document NPL32.

- 3 -

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this reexamination proceeding that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Applicant Registration No. 36,013

Date: May 22, 2006

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					Application Number	90/007,617	
INFO	RMA	ΓΙΟΝ	DISCL	OSURE	Filing Date	July 6, 2005	
				ICANT	First Named Inventor	L. Tymes	
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					Examiner Name	Hanh Nguyen	
Sheet	1	of	1		Attorney Docket Number	2319.065REX0	

			U.S. PATENT DO		
Examiner Cite Initials No.	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	No.'	Number-Kind Code ^{2 (if Known)}	MM-DD-YYYY	Applicant of Cited Document	
	US24	4,449,248	05/15/1984	LESLIE, et al.	
	US25				
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		Fo	REIGN PATENT DO	DCUMENTS		
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		Country Code ¹ Number ⁴ Kind Code ⁵ (if known)			Relevant Passages or Relevant Figures Appear	T6
	FP4	DE 3304451	10/1984	KAPPELLER		X
	FP5	EP 0 131 662	01/23/1985	RODMAN		
	FP6	JP 53-108310	09/21/1978	HORUMESU, et al.		1
	FP7	JP 55-136733	10/24/1980	HARUO, et al.		1
	FP8	JP 61-071738	04/12/1986	KENJI, et al.		
	FP9	JP 61-270930	12/01/1986	HIROSHI		
	FP10	JP 63-198438	08/17/1988	MASAKAZU, et al.		

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	_		s necessary)	Art Unit	2616		
				Examiner Name	Hanh Nguyen		
Sheet	1	of	1	Attorney Docket Number	2319.065REX0		

		Non Patent Literature Documents	
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	NPL26	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.	
	NPL27	Certified Translation of German Patent No. DE 3304451, 21 pages (October 18, 1984 - Date of Publication of Patent).	
	NPL28	English Language Abstract of Japanese Patent Publication No. JP 53-108310, data supplied by espacenet, 1 page (September 21, 1978 - Date of Publication).	
	NPL29	English Language Abstract of Japanese Patent Publication No. JP 55-136733, data supplied by espacenet, 1 page (October 24, 1980 - Date of Publication).	
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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•	SSLER, GOLDSTEI ORK AVENUE, N.W.	N & FOX PLLC		
	N, DC 20005		ART UNIT	PAPER NUMBER

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

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UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspro.gov

7/20/2006

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS Edward C. Kwok MACPHERSON KWOK CHEN & HEID LLP 1762 Technology Drive, Suite 226

San Jose, CA 95110

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO 90/007617 PATENT NO. 5,029,183 ART UNI 3993

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

	Control No.	Detent Under D	aavaminatiaa
Ex Parto Doovamination Interview Summers	Control No. 90/007,617	Patent Under R 5029183	eexamination
Ex Parte Reexamination Interview Summary	Examiner	Art Unit	
	Roland G. Foster	3992	
All participants (USPTO personnel, patent owner, patent o	wner's representative):	L	J
(1) <u>Roland G. Foster</u>	(3) <u>Lori Gordon</u>		
(2) <u>Robert Sokohl</u>	(4)		
Date of Interview: <u>11 July 2006</u>			
Type: a)☐ Telephonic b)☐ Video Conference c)⊠ Personal (copy given to: 1)∏ patent owner	2)⊠ patent owner's repr	esentative)	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Agreement with respect to the claims f) was reached. Any other agreement(s) are set forth below under "Descrip	g) was not reached. h)	☑ N/A. /hat was agreed	to"
Claim(s) discussed: <u>1</u> .			
Identification of prior art discussed: Koohgoli, Carlman.			
Description of the general nature of what was agreed to if a <u>Patent Owner's representatives explained the construction</u> specification and by the district court.			
(A fuller description, if necessary, and a copy of the amend patentable, if available, must be attached. Also, where no patentable is available, a summary thereof must be attached	copy of the amendments that	preed would rend would render the	er the claims e claims
A FORMAL WRITTEN RESPONSE TO THE LAST OFFIC STATEMENT OF THE SUBSTANCE OF THE INTERVIEW LAST OFFICE ACTION HAS ALREADY BEEN FILED, TH INTERVIEW DATE TO PROVIDE THE MANDATORY STA (37 CFR 1.560(b)). THE REQUIREMENT FOR PATENT OF OF TIME ARE GOVERNED BY 37 CFR 1.550(c).	V. (See MPEP § 2281). IF A EN PATENT OWNER IS GIV ATEMENT OF THE SUBSTAN	RESPONSE TO EN ONE MONTH NCE OF THE INT	THE I FROM THIS FERVIEW
	th	'A~	
cc: Requester (if third party requester)	Examiner's sign	nature, if required	ł

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Robert Greene Sterne Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michele A. Cimbala Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Horner Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Judith U. Kim Patrick E. Garrett Jeffrey T. Helvey Eldora L. Ellison Thomas C. Fiala Donald R. Banowit Peter A. Jackman Jeffrey S. Weaver Brian J. Del Buono Edward W. Yee Vincent L. Capuano Virgil Lee Beaston Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Daniel A. Klein ason D. Eisenberg Michael D. Specht

August 9, 2006

Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cynthia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Laura A. Vogel Bryan S. Wade Bashir M.S. Ali Shannon A. Carroll Matthew E. Kelley Anbar F. Khal Michelle K. Holoubek Marsha A. Rose Young Tang Christopher J. Walsh W. Blake Coblentz* James J. Pohl* John T. Haran Mark W. Rygiel Kevin W. McCabe

Registered Patent Agents-Karen R. Markowicz Matthew J. Dowd Katrina Yujian Pel Quach Bryan L. Skelton Robert A. Schwartzman Victoria S. Rutherford Simon J. Elliott Julie A. Heider Mita Mukheriee Scott M. Woodhouse Liliana Di Nola-Baron Peter A. Socarras Jeffrey K. Mills Danielle L. Letting Lori Brandes Steven C. Oppenheimer

<u>Of Counsel</u> Edward J. Kessler Kenneth C. Bass III Marvin C. Guthrie

*Admitted only in Maryland * Admitted only in Virginia •Practice Limited to Federal Agencies

WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Art Unit 3992

Attn: Mail Stop Ex Parte Reexam

Re: Reexamination of U.S. Patent No. 5,029,183 Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: L. Tymes Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Statement of Substance of Interview Under 37 C.F.R. §1.560;
- 2. Certification of Service on Third Party Requestor of Statement of Substance of Interview Under 37 C.F.R. §1.560;
- 3. Second Supplemental Information Disclosure Statement;
- 4. Certification of Service on Third Party Requestor of Second Supplemental Information Disclosure Statement;
- 5. Listing of the Cited Documents on Form PTO/SB/08A (1 page);
- 6. Listing of the Cited Documents on Form PTO/SB/08B (1 page);
- 7. Copies of the Cited Documents (FP11-FP13) and (NPL33); and
- 8. One $(\underline{1})$ return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are

Commissioner for Patents August 9, 2006 Page 2

necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Applicant Registration No. 36,013

RES/LAG:smn Enclosures

561444_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183 (TYMES)

Control No.: 90/007,617 Filed: July 6, 2005 For: Packet Data Communication Network Confirmation No.: 7501 Art Unit: 3992 Examiner: Roland G. Foster Atty. Docket: 2319.065REX0

Statement of Substance of Interview Under 37 C.F.R. §1.560

Attn: Mail Stop Ex Parte Reexam

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with 37 C.F.R. § 1.560, Applicants submit the following Statement of Substance of Interview for the interview conducted on July 11, 2006 between Examiner Roland G. Foster and Patent Owner's representatives, Robert E. Sokohl and Lori A. Gordon .

During that interview, the Patent Owner's representatives explained the required construction of the claim term "base station" according to the prosecution history and specification. Patent Owner's representatives further explained that this required construction is in complete agreement with the claim construction by the Honorable Chief Judge Sue L. Robinson in the Symbol Technologies, Inc. v. Proxim, Inc. litigation, Civil Action No. 1:01-cv-00801-SLR (District Court for the District of Delaware, July 30, 2003). Finally, the Patent Owner's representatives explained that the cited art fails to disclose, teach, or suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time or other fees are required. However, if any fees are necessary to prevent abandonment of this application, then such fees are hereby petitioned and hereby authorized to be charged to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl Attorney for Applicant Registration No. 36,013

Date: <u>August 9, 2006</u>

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent No. 5,029,183 (TYMES) Control No.: 90/007,617 Filed: July 6, 2005 For: Packet Data Communication Network

Confirmation No.: 7501 Art Unit: 3992 Examiner: Roland G. Foster Atty. Docket: 2319.065REX0

Second Supplemental Information Disclosure Statement

Mail Stop Ex Parte Reexam

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Forms PTO-1449 and PTO-SB08 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.555 and 1.98.

Applicant has listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Copies of documents NPL33 and FP11-FP13 are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached IDS Forms are submitted.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this reexamination proceeding that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Applicant Registration No. 36,013

Date: August 9, 2006

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

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Atty. Dkt. No. 2319.065REX0

Page 123 of 341

Equivalent of Form PTO/SB/08A (07-05) Approved for use through 07/31/2006. U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	for form	1449/PT	о С	Complete if Known		
SECO		TIDDI	EMENTAL	Application Number	90/007,617	
				Filing Date	July 6, 2005	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				First Named Inventor	L. Tymes	
				Art Unit	3992	
				Examiner Name	Roland G. Foster	
Sheet	1	of	1	Attorney Docket Number	2319.065REX0	

			U.S. PATENT DO	DCUMENTS	
Examiner Cite Initials' No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Number-Kind Code ^{2 (If Known)}			or Relevant Figures Appear
	US25	4,344,171	08-10-1982	LIN, et al.	_
	US26	4,654,654	03-31-1987	BUTLER, et al.	
	US27	4,679,244	07-07-1987	KAWASAKI, et al.	
	US28	4,811,379	03-07-1989	GRANDFIELD	
	US29	4,882,770	11-21-1989	MIYAHIRA, et al.	
	US30	4,940,963	07-10-1990	GUTMAN, et al.	
	US31	4,979,168	12-18-1990	COURTOIS, et al.	
	US32	5,020,093	05-28-1991	PIREH	
	US33				
	US34		<u> </u>		
	US35				
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	US39				
	US40				
	US41				
	US42				
	US43				
	US44				
	US45				

		FC	DREIGN PATENT DO	DCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)			Relevant Passages or	
					Relevant Figures Appear	T
	FP11	EP 0 303 020	02-15-1989	UEHARA		
	FP12	EP 0 314 217	05-03-1989	COURTOIS, et al.		
	FP13	EP 0 319 219	06-07-1989	MURAI, et al.		

568249_1.DOC

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). 'See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 'For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 'Applicant is to place a check mark here if Evaluate the context of the context of the context of the text of the context of the context of the patent document.' English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to Complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

TO: Commissioner for Patents, P.O. Box 1450, Alexangria, vA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. Page 124 of 341

PTO/SB/08B (07-05) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				Complete if Known		
SECOND	CLIDDI	EN/I		Application Number	90/007,617	
SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Filing Date	July 6, 2005	
				First Named Inventor	L. Tymes	
				Art Unit	3992	
			s necessary)	Examiner Name	Roland G. Foster	
Sheet	1	of	1	Attorney Docket Number	2319.065REX0	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T ²
	NPL33	LIN, Shu and COSTELLO, Daniel J., Jr., "ERROR CONTROL CODING: Fundamentals and Applications," Prentice-Hall, Inc., Englewoods Cliffs, NJ, 1983, pp. 458-465.	
	NPL34		
	NPL35		
	NPL36		
	NPL37		
	NPL38		
	NPL39		
	NPL40		
	NPL41		

568253_1.DOC

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Examiner	Date	
Signature	Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATION OF SERVICE OF STATEMENT OF SUBSTANCE OF INTERVIEW UNDER 37 C.F.R. §1.560

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on August 9, 2006. The name and address of the party served is as follows:

Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date: August 9, 2006

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

561441_1.DOC

L. Tymes Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

<u>CERTIFICATION OF SERVICE OF SECOND SUPPLEMENTAL INFORMATION</u> <u>DISCLOSURE STATEMENT</u>

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on August 9, 2006. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

> > Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date: August 9, 2006

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

Atty. Dkt. No. 2319.065REX0

			UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 22: www.uspto.gov	Trademark Office OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	M-16056-REUS	7501
	590 02/09/2007 SSLER, GOLDSTEIN		EXAM	INER
I TOU NEW YC	N, DC 20005	a TOAT.L.L.C.	ART UNIT	PAPER NUMBER

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

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UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

2/9/07

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS Edward C. Kwok MACPHERSON KWOK CHEN & HEIDI LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO 90/007617 PATENT NO. 5,029,183 ART UNI 3993

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

		Control No. 90/007,617	Patent Under Reexamination 5029183					
Offi	ce Action in Ex Parte Reexamination	Examiner Roland G. Foster	Art Unit 3992					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
a⊠ Re c∏ A	a Responsive to the communication(s) filed on $\frac{4/14/06 \& 4/9/06}{2}$. b This action is made FINAL. c A statement under 37 CFR 1.530 has not been received from the patent owner.							
Failure certifica If the pe	A shortened statutory period for response to this action is set to expire <u>2</u> month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an <i>ex parte</i> reexamination certificate in accordance with this action. 37 CFR 1.550(d). EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c). If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.							
Part I	THE FOLLOWING ATTACHMENT(S) ARE PART OF	THIS ACTION:						
1.	Notice of References Cited by Examiner, PTO-89	2. 3. 🗌 Interview Summa	ry, PTO-474.					
2.	Information Disclosure Statement, PTO/SB/08.	4. 🔲						
Part II	SUMMARY OF ACTION							
1a.	Claims <u>1-84</u> are subject to reexamination.							
1b.	Claims are not subject to reexamination.							
2.	Claims have been canceled in the present	reexamination proceeding.						
3.	Claims 45,46,58,59 and 69-84 are patentable and	d/or confirmed.						
4.	Claims <u>1-44, 47-57, and 60-68</u> are rejected.							
5.	Claims are objected to.							
6.	The drawings, filed on are acceptable.							
7.	The proposed drawing correction, filed on	has been (7a) approved (7b)	disapproved.					
8.	Acknowledgment is made of the priority claim unc	ier 35 U.S.C. § 119(a)-(d) or (f).						
	a)☐ All b)☐ Some* c)∏ None of the certifi	ed copies have						
	1 been received.							
	2 not been received.							
	3 been filed in Application No							
	4 been filed in reexamination Control No.	<u></u> .						
	5 been received by the International Bureau in	PCT application No						
	* See the attached detailed Office action for a list o	f the certified copies not received.						
9.	Since the proceeding appears to be in condition f matters, prosecution as to the merits is closed in 11, 453 O.G. 213.	or issuance of an <i>ex parte</i> reexamina accordance with the practice under <i>E</i>	tion certificate except for formal <i>x part</i> e Quayle, 1935 C.D.					
10.	Other:							
_								

Reexamination

Summary

The reply, filed on April 14, 2006, (the "Reply") and the Patent Owner's summary of the interview, filed on August 09, 2006, (the "Interview Summary") have been duly considered but are not deemed persuasive to overcome the prior rejections. See the "Response to Arguments" section below for additional details. A new grounds of rejection, however, is set forth below to address certain issues observed by the Office in the last rejection, mailed on February 14, 2006, and thus develop a more complete prosecution history in the reexamination proceeding.

Claim Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 5-7, 9, 10, 14-18, 21, 22, 25-28, 35-37, 40-42, 47-50, 53, 54, 56, 57, 60, 63,

and 66-69 are rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 4,771,448

("Koohgoli"), of record.

Regarding claims 1, 5, 21, 25, 26, 40, and 47:

1. A method of transmitting data packets from one of a plurality of remote terminal units to a base station, comprising the steps of:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

Before applying Koohgoli to claim 1, it is helpful to consider claim 1 in view of Patent Owner's specification. Patent Owner's specification teaches that data packets are transmitted from the remote unit during a first time period t2 (Fig. 2 and col. 5, 11. 40-61), immediately after which the remote unit "begins listening for the return packet...from the base station" during a second time period occurring a fixed time delay (t3) after the first period (Figs. 2, 11A, 11B, and col. 5, 11. 58-61). Consider Figure 1 below.



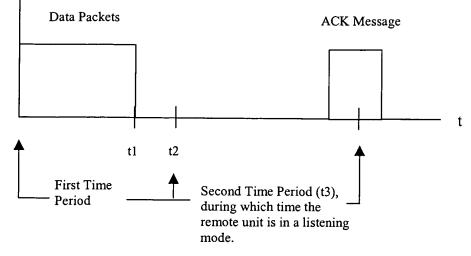
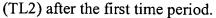


Figure 1. Claim 1 in View of Patent Owner's Specification.

Similarly, and as to be discussed in detail below, Koohgoli teaches that data packet(s) (a REQ message) are transmitted from the remote unit during a first time period, defined as the time TL1 plus the time required to transmit the REQ message, immediately after which the remote unit goes into a listening mode during a second time period occurring a fixed time delay



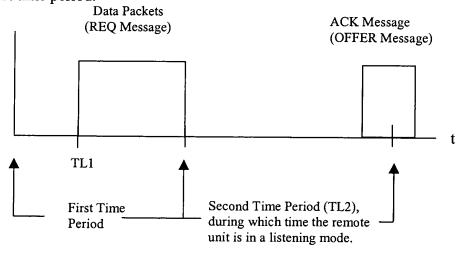


Figure 2. Claim 1 as Applied to Koohgoli

Specifically regarding claim 1, Koohgoli teaches, in Fig. 3, a method of transmitting data packets from one of a plurality of remote terminal units (a portable unit 16, which is also a data terminal, col. 6, ll. 27-31) to a base station (base station 13), comprising the steps of transmitting a data packet from the one unit to the base station during a first time period selected by the unit. In particular, the portable unit 16 transmits a message, such as a request ("REQ") message (data packet) (col. 7, ll. 48-67), from the portable unit 16 to the base station 13 during the a first time period comprised by the time TL1 plus the time required to transmit the message (col. 11, line 62 – col. 12, line 2). The remote unit (portable unit 16) assigns TL1 to a random value TR (col. 11, ll. 64-68), thus the remote unit selects TL1. Because the first time period is TL1 plus the time required to transmit the REQ data packets, the remote unit therefore also selects the length

of the first time period.

Koohgoli also teaches receiving at said remote terminal unit (portable unit 16) from the base station an OFFER message, which is transmitted by the base station in recognition of the previously received REQ message (col. 8, ll. 1-40) and where the remote terminal expects and processes such a response (col. 8, ll. 41-68). Thus, the OFFER message is an acknowledgement signal.

The acknowledgement signal (OFFER message) is received at the remote unit (portable 16) during a second time period occurring only a fixed time delay TL2 after the first time period, during which time the remote unit (portable unit 16) goes into a listening mode waiting for the acknowledgement signal (col. 12, ll. 3-20).

The second time period is preferably 2000 microseconds (col. 12, ll. 21-25), which would be the same for all the remote terminal units (portables 16) (col. 6, ll. 27-31).

Claim 21 differs substantively from claim 1 in that claim 21 recites a system comprising components that implements the steps recited in the method of claim 1. Therefore, see the claim 1 rejection for additional details. Furthermore, data is transferred from the base station to the remote terminal unit via a radio frequency ("RF") communications channel (col. 6, ll. 43-50), thus a "transmitter" is inherent to a base station 13 and a "receiver" is inherent to a portable, remote unit (portable unit 16).

Claim 40 differs substantively from claim 1 in that claim 40 recites that the data packet includes the identification ("ID") of the terminal and that the acknowledgement signal includes the ID of the terminal. Koohgoli further teaches that the data packet (REQ message) includes the ID of the terminal (ID of portable unit 16) (col. 7, 1. 60-62) and that the acknowledgement signal (OFFER message) includes the ID of the terminal (portable unit 16) as well as base station 13 (col.8, lines 20-23).

Claims 50 and 60 differ substantively from the claims discussed above in the following manner. The subject claims recites a "host computer," which reads on switch 11, which is a computer-based switch, such as an SL-100 (Northern Telecom) private branch exchange (col. 5, ll. 47-51).

The claims also recite a variety of "input/output ports", however the term "port" is a broad term that means a hardware interface that connects one computer device to another. Koohgoli teaches that all computer devices are connected to each other (Figs. 1 and 2) and thus the computer devices of Koohgoli comprise input/output ports wherever they connect together.

The subject claims also recite that the base stations also include an "RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets." As discussed above, Koohgoli teaches that the base station detects REQ data packets and transmits acknowledge (OFFER) data packets over a radio frequency ("RF") channel. See also col. 6, ll. 43-50. Thus, the base station includes an RF transmitter and receiver. See also the claim 21 rejection. Furthermore, Koohgoli teaches that the transmitted packet received at the base station and the acknowledge signal sent by the base station are coded into and decoded from the appropriate protocols radio protocols, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, ll. 50-55). Thus, the base station performs coding/decoding to and from the radio channel.

The subject claims also recite that the remote units include a "memory for storing data from a local data source, and a processor for transferring data to and from the memory." The remote terminal unit (portable unit 16) in Koohgoli is a computer-based system (see, e.g., col. 6, ll. 26-31) and thus includes a processor that implements the functions of the remote terminal unit and a memory to store binary data that the processor fetches instructions and data received

and/or transmitted from the local data source (or from the RF channel) would also be, at least temporarily, stored and/or buffered in computer memory before being processed by the processor.

The subject claims also recite that the remote unit includes an "RF transmitter/receiver" for performing various functions (e.g., transmitting encoded data packets, detecting an acknowledge signal packet from the base station in a fixed time window) previously addressed above. Thus, the remote terminal unit includes the recited means for transmitting encoded packets and a detector. The subject claims also recite that the remote terminal unit includes a "modulator for modulating an outgoing carrier." The remote unit includes an RF transmitter/receiver for the same reasons that the base station also includes an RF transmitter/receiver, which was discussed extensively above. See also the claim 21 rejection. The remote terminal unit (portable unit 16) also modulates a carrier frequency (col. 12, ll. 3-10) and thus would include a modulator.

Regarding **claims 2, 22, and 42**, Koohgoli discloses the transmitting and receiving steps are by RF signals. See the claims 1, 12, and 50 rejections above. Therefore, the transmitting and receiving steps are performed by RF signals.

Regarding claims 5 and 25, see the claim 40 rejection for additional details.

Regarding claim 6, see the claim 1 rejection for additional details.

Regarding **claims 7 and 27**, Koohgoli discloses the remote stations are hand-held data gathering units, which include manual control elements and where each remote unit 16 is capable of receiving/transmitting voice/<u>data</u> by the manual placement/reception of a calls (col.6, lines 30-42).

Regarding **claim 9**, the base station in Koohgoli is a computer-based system and thus includes a processor that implements the functions of the base station device and a memory to store binary data that the processor fetches instructions and data from. Transmitted and received data packets would also be, at least temporarily, stored and/or buffered in the computer memory.

Regarding **claim 10**, Koohgoli teaches that both the transmitted packet received at the base station and the acknowledge signal sent by the base station are coded into and decoded from the appropriate protocols radio protocols, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, 11. 50-55). Thus, a processor in the base station, which implements the functions of the base station device, as discussed in the claim 9 rejection above, would also perform coding/decoding to and from the radio channel.

Regarding **claim 14**, Koohgoli teaches that a second station transmits the acknowledgement signal. Specifically, a base station (second station) sends an acknowledgment signal (OFFER message, as discussed in the claim 1 rejection above) to portable unit 16. The base station (second station) is one of a plurality of said second stations physically spaced from

one another that may send an acknowledgment signal (OFFER message) because the base station 13 is one of plurality of other base stations 13 located in separate cells 12 (Fig. 1 and col.5, 1. 50 - col. 6, 1. 30). There is a plurality of remote terminal units (portable units 16) for each of the second station because there are many portable units 16 in each cell 12 in which the base station 16 is located (col. 6, ll. 27-31).

Regarding **claims 15, 17, and 36**, Koohgoli teaches that the transmitted packet and the acknowledge signal is coded into the appropriate protocol, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, ll. 50-55) and identifies each unit, as discussed in the claim 40 rejection above. Thus the identification would be unique to the particular terminal unit; otherwise the remote terminal unit could not be identified, contrary to the teachings of Koohgoli.

Regarding claims 16, 35, and 41, Koohgoli discloses the unit, prior to the transmitting, receives the data packet in order to detect transmission by other like units (portable unit 16 senses the activity of uplink channel to determine if the uplink channel is free to transmit, see col.7, lines 52-57 and col. 11, 1. 40 - col. 12, 1. 25).

Regarding **claims 18, 28 and 37**, the remote terminal unit in Koohgoli is a computerbased system and thus includes a processor that implements the functions of the remote terminal unit and a memory to store binary data that the processor fetches instructions and data from. Transmitted and received data packets would also be, at least temporarily, stored and/or buffered in computer memory. Regarding claim 26, Koohgoli teaches a plurality of remote stations (portable units 16) (col. 6, ll. 27-31).

Regarding claim 47, see col. 8, 11. 19-23.

Regarding **claims 48 and 49**, Koohgoli teaches that the remote terminal will not listen and instead attempt to transmit data (i.e., nonresponsive to transmissions from the base station) after the time window TL2 has elapsed (col. 12, ll. 1-20). Also note that the remote terminal is responsive to the transmission from base station only during the request time out period (col.8, lines 45-68). See the claim 1 rejection for additional details.

Regarding **claim 53**, Koohgoli that each base station is coupled for communication to a host computer (switch 11), as discussed in the claim 50 rejection, via a serial land link 14 (col.7, lines 1-35).

Regarding claim 54, see the claim 1 rejection for additional details.

Regarding claims 56 and 63, see the claims 1 and 15 rejections above for additional details.

Regarding claim 57, see col. 8, ll. 1-10.

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Regarding claim 66, see the claim 1 rejection for additional details.

Regarding claims 67 and 68, see the claims 1 and 50 rejections for additional details.

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.

Claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51, 52, 61, and 62 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli, as applied to the claims above.

Regarding **claims 8, 19, 29, 38, 51, and 61,** Koohgoli discloses the remote unit including bar-code reading devices (portable unit 16 is capable of scanning all downlink radio channels; see col. 6, lines 30-34). Thus, the portable unit 16 is clearly a data-gathering device, which the Patent Owner considers capable of being equivalent to a bar code reading device. See for example, col. 5, ll. 25-32 of the Tymes patent under reexamination, where, although "bar-code readers are mentioned....[0]ther types of data gathering devices may use the features of the invention..." Nonetheless, Koohgoli fails to explicitly disclose that the remote data terminal may be a bar code reader device.

However, the Patent Owner admits in the background section of the Tymes patent that prior art, remote data terminals, in the form of bar code reader, are connected to radio frequency ("RF") networks (col. 1, ll. 10-42).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to implement the remote data terminals connected to an RF network, as taught by Koohgoli as a bar code reader, as taught by Patent Owner's admitted prior art.

The suggestion/motivation for doing so would have been to the flexibility and convenience of the bar code reading system, for example, "when the bar code reader is to be used by a person who is moving about a building, or when temporary installations are employed, physical wiring is unsuitable, or is at least quite inconvenient" (Tymes, col. 1, ll. 15-20).

Regarding claims 3, 4, 11, 23, 24, 31, 43, 52, and 62, Koohgoli fails to disclose the RF signals are a spread spectrum direct sequence. Such a teaching however was officially noticed as being well known by the examiner in the last Office action and the Patent Owner in his reply did not traverse such an finding. Thus, the examiner's statement is taken to be admitted prior art.

Therefore, it would have been obvious to use RF signals in spread spectrum direct sequence in cellular system of Koohgoli.

The suggestion/motivation for doing so would have been to increase communication channel efficiency by prevent co-channel interferences. Specifically, and as officially noticed, the use of RF signals in spread spectrum direct sequence is well known in the art because each remote unit is assigned a PN code which prevent interferences between different remote units.

Regarding **claims 12, 13, 32, and 33**, Koohgoli discloses the acknowledge signal is transmitted by a second station which is one of a plurality of like second stations (base station 13, like other base stations 13, transmits an OFFER message to portable unit 16; see col.8, lines 15-20); and each one of the second stations is coupled for communication to a central computer (in cellular system as shown in Fig.1, each base station 13 is coupled to a switch 11 via a serial land link 14; see also col.7, lines 1-35). See the claim 14 rejection for additional details.

Regarding **claims 20 and 30**, Koohgoli discloses the remote unit including keyboard inputs and visual display (portable unit 16 are telephone units or data modem; see col.2, lines 65; which are used in cellular network. Therefore, they have keyboard inputs and visual display).

Regarding claim 34, see the claims 50 and 60 rejections for additional details.

Regarding **claim 39**, Koohgoli discloses the remote unit including keyboard inputs and visual display (portable unit 16 are telephone units or data modem; see col.2, lines 65; which are used in cellular network. Therefore, they have keyboard inputs and visual display).

Claims 55, 64, and 65 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli in view of Carlman, as applied to the claims above, and further in view of U.S. Patent No. 4,332,027 ("Malcolm"), of record.

Regarding **claims 55 and 64**, Koohgoli and Carlman fail to disclose the encoded RF signal including a header containing a synchronizing signals followed by a block of data signals.

Malcolm however discloses, in Fig.2, a fixed size packet containing syn code followed by a destination address (a header). The destination address is followed by a data field. See col.3, lines 5-15.

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to have synchronizing signal in the RF signal of Koohgoli so that the request and ACK signals are transmitted and received at a desired time thereby increasing the efficiency, predictability, and accuracy of data transmission. For example, use of the synchronizing signal would have "minimized conflicts between the respective nodes without requiring transmitting stations to be capable of detecting collisions" (Malcom, col. 1, ll. 60-68) without requiring a costly, complex master controller (Malcom, col. 1, ll. 13-40). Regarding claim 65, see the claims 1 and 15 rejection above for additional details.

Claim 44 is rejected under 35 USC 103(a) as being unpatentable over Koohgoli as applied to the claims above, and further in view of U.S. Patent No. 4,587,661 ("Shiff"), of record.

Koohgoli fails to disclose spread spectrum technique employs a sequence of frequency shifts between two frequencies. Shiff discloses a spread spectrum transmission between an earth station and satellite such as indicated in fig.4, a change in frequency occurs in response to a change of clock pulse rate; see col.7, lines 8-20 (a sequence of frequency shifts between two frequencies). Therefore, it would have been obvious use the frequency shift of Shiff into the Koohgoli et al. in order to provide synchronization at portable unit 16. Furthermore, such synchronization would have increased efficiency by maintaining the a low error rate because orthogonality of the sequences (Shiff, col. 2, 11. 44-68).

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

The following is an examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding.

Claims 45, 46, 58, 59 and 69-84 are confirmed.

Regarding confirmation of claims 45, 46, 58, 59, and 69-75, see pages 9 and 10 of the non-final Office action, mailed February 14, 2006 for further details.

Regarding confirmation of independent claim 76, from which claims 77-84 depend, Koohgoli fails to teach the limitations "receiving said distress packet at a plurality of base stations, and at each one of said base stations, sending a message to other of said base stations indicating the identity of said remote terminal and the quality of reception of said distress packet" and "at a base station, comparing said message to select one of said base stations to be designated for communications with said remote terminal." Although Koohgoli teaches receiving a distress packet at a plurality of base stations, Koohgoli fails to teach that "each of said base stations" (i.e., every base station that received a distress packet) send messages specifically intended for the other base stations to receive, much less a message indicating the identity of the remote terminal and a quality of reception of the distress packet. Instead all messages sent by the base station are sent to the remote terminal unit (portable unit 16) (Fig. 3), including those messages containing quality of reception information (col. 8, ll. 46).. Furthermore, it is the remote terminal units (portable 16) rather than the base stations that "compare[]..said message to select one of said base stations" (col. 8, 11. 43-59). Thus, Koohgoli would require significant structural modification in order to teach all limitations within claim 76.

The remaining prior art of records fails to teach or fairly suggest the obviousness of substantially modifying Koohgoli (as discussed above) in order to arrive at the invention as recited in claim 76. Indeed, the Patent Owner and Third Party cited prior art of record, including

the Koohgoli patent, appears to be substantially directed to different features, which were recited in claims 1, 16, 21, 35, 40, and 41 and which were apparent the focus of the Request for Reexamination, filed on July 6, 2005. For example, independent claim 1 recites feature directed to receiving an acknowledge signal during a second time period occurring only a fixed time delay after said first time period. Similarly, all of the prior art of record cited in the Request was similarly directed to these features, instead of to the features recited in claim 76 discussed above.

Because the Patent Owner and Third Party prior art of record, including the Koohgoli patent, was cited for teaching purposes that substantially differ from the feature recited in claim 76, as discussed above, said prior art of record, either alone or in combination, fails to teach or fairly suggest the obviousness of the features recited in claim 76.

The above reasons for confirmation are based on the claims as presently set forth in their totality. The above reasons for confirmation should not be interpreted as indicating that amended claims broadly reciting certain limitations discussed in the above reasons for confirmation would be allowable. A more detailed reasons for confirmation may be set forth in a subsequent Office action if and when all claims in the reexamination proceeding are put into a condition for determination of patentability.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the

patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

Response to Arguments

<u>Summary</u>

Patent Owner argues that the claim term "base station" is specially defined in the specification, by the prosecution history, and by claim construction rulings in a U.S. District court to mean a unit, which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption.

The Patent Owner arguments have been duly considered, but are deemed unpersuasive for the reasons explained below. Furthermore, even if limitations from the specification should be read into the claims as the Patent Owner argues, which they should not, the applied 102 art of record <u>still teaches these unclaimed limitations</u>.

The Patent Owner Did Not Act as His Own Lexicographer

On page 20 and 21 of the Reply and in the Interview Summary, the Patent Owner argues that certain sections in the specification of U.S. Patent No. 5,029,183 currently under reexamination (the "Tymes" patent) give the claim term "base station" a special definition

meaning a "unit which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption."

The Patent Owner is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning(s). See <u>In re Paulsen</u>, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (holding that specific terms may be used to describe invention, but must done "with reasonable clarity, deliberateness, and precision" and, if done, must "set out his uncommon definition in some manner within the patent disclosure' so as to give one of ordinary skill in the art notice of the change" in meaning) (quoting <u>Intellicall</u>, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992)). See also <u>Merck & Co., Inc., v. Teva Pharms. USA</u>, Inc., 395 F.3d 1364, 1370, 73 USPQ2d 1641, 1646 (Fed. Cir. 2005) ("When a patentee acts as his own lexicographer in redefining the meaning of particular claim terms away from their ordinary meaning, he must <u>clearly express that intent</u> in the written description.") (emphasis added). See also MPEP 2111.01.IV.

Here, rather than pointing to a special definition in the specification, the Patent Owner instead points to <u>embodiment(s)</u> describing a base station that refrains from initiating data communications with a remote terminal. See page 21 of the Reply. In contrast, the claims only explicitly recite a "base station." "[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the

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embodiment." <u>Superguide Corp. v. DirecTV Enterprises, Inc.</u>, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). "[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments." <u>Innova/Pure Water, Inc. v. Safari Water Filtration Sys.</u>, Inc. 381 F.3d 111, 115 (Fed. Cir. 2004). See also <u>Liebel-Flarsheim Co. v. Medrad Inc.</u>, 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004) (discussing recent cases wherein the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment). "When the claim addresses only some of the features disclosed in the specification, it is improper to limit the claim to other, unclaimed features. <u>Phillips v. AWH Corp.</u>, 415 F.3d 1303, 1327 (Fed. Cir. 2005) (en banc).

Furthermore, <u>none</u> of the embodiments cited by the Patent Owner in the Reply mention the advantage of minimizing <u>power consumption</u>, which is part of the "special definition" proposed by the Patent Owner. Indeed, the Tymes patent teaches that various embodiments have <u>other</u> advantages, such as "low-cost" units of "lesser computational capacity" (col. 3, 11. 10-14 and col. 13, 11. 17-19, 25-30, and 42-51). Thus, minimization of power consumption is merely <u>one of several</u>, exemplary advantages that one of ordinary skill in the art would consider when interpreting the claims. Thus, minimization of power consumption would have been an unclear and imprecise choice for a special definition.

Thus, the Tymes patent fails to clearly express an intent with reasonable clarity and precision to one of ordinary skill in the art that the claim term "base station" should be

interpreted according to a special definition, namely as a unit which cannot initiate data communications with a remote terminal until so the remote terminal unit can minimize power consumption. Rather, the Tymes patent describes embodiment(s) rather than a special definition, where minimization of power consumption is merely one of several disclosed advantages, rendering it an unclear and imprecise choice for a special definition.

The Tymes Patent Is Before the Office in a Reexamination Proceeding, Thus the Prosecution History is Currently Incomplete

On pages 22 and 23 of the Reply and in the Interview Summary, the Patent Owner argues that prosecution history establishes a special meaning for a claim term by ways of statements in the prosecution history. These arguments are unpersuasive however because prosecution of the Tymes patent has been reopened before the Office based on a substantial new question of patentability. Furthermore, prior art is being applied that was not of record in the original proceeding. Thus, the prosecution history of the Tymes patent is clearly ongoing and incomplete. Furthermore, the prosecution history identified by the Patent Owner refers to unilateral statements by the Patent Owner and not to any statements made by the prior examiner of record. Finally, prosecution history estoppel of a United States patent is an issue typically addressed by courts of law. Phillips at 1317 ("In addition to consulting the specification, we have held that <u>a court</u> 'should also consider the patent's prosecution history....") (emphasis added).

The US Patent Office and Federal Courts Utilize Different Standards for Claim Construction:

On pages 24 and 25 of the Reply and in the Interview Summary, the Patent Owner argues

that the "claim construction ruling by the Honorable Chief Judge Sue L. Robinson in the Symbol

Technologies, Inc. v. Proxim, Inc. litigation is in complete agreement with the special definition

of the term 'base station' set out by the Patent Owner in the specification and prosecution

history."

This argument is unpersuasive however because the U.S. Patent Office and the Federal courts utilize different standards for claim construction. Furthermore, the claim construction rulings made by Judge Robinson do <u>not</u> appear to be in agreement with the special definitions advanced by the Patent Owner in the Reply and in the Interview Summary.

37 CFR 1.555(b) states (emphasis added):

A prima facie case of unpatentability of a claim pending in a reexamination proceeding is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its <u>broadest</u> <u>reasonable construction</u> consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

Note also MPEP 2111 states:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Further:

See also In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in

applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification.").

Such a "broadest reasonable interpretation consistent with the specification" is further

required in Reexamination proceedings as well. Note 2258(1)(G) states:

Original patent claims will be examined only on the basis of prior art patents or printed publications applied under the appropriate parts of 35 U.S.C. 102 and 103. See MPEP § 2217. During reexamination, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)).

Thus, the "broadest reasonable construction' rule applies to reexaminations as well as

initial examinations", where "construing claims broadly during prosecution is not unfair to the

applicant...because the applicant has the opportunity to amend the claims to obtain more precise

claim coverage." In re American Academy of Science Tech Center, 70 USPQ2d 1827, 1830, 367

F3d 1359, 1364 (Fed. Cir. 2004).¹ "[I]t is important that the district court and the PTO can

consider different evidence....[a]ccordingly, different results between the two forums may be

entirely reasonable....[a]nd, if the district court determines a patent is not invalid, the PTO should

continue its reexamination because, of course, the two forums have different standards of proof

¹ "Finally, American Academy points to an inconsistency between the Board's construction of the term "user computer" and that of the district court in American Academy's litigation against Novell. In the district court litigation, the court construed "user computer" to refer to a computer that serves one user at a time. However, the Board is required to use a different standard for construing claims than that used by district courts. It has been held that it is error for the Board to "appl[y] the mode of claim interpretation that is used by courts in litigation, when interpreting the claims of issued patents in connection with determinations of infringement and validity." In re Zletz, 893 F.2d 319, 321 (Fed. Cir. 1989); accord In re Morris, 127 F.3d 1048, 1054 (Fed. Cir. 1997) ("It would be inconsistent with the role assigned to the PTO in issuing a patent to require it to interpret claims in the same manner as judges who, post-issuance, operate under the assumption the patent is valid."). Instead, as we explained above, the PTO is obligated to give claims their broadest reasonable interpretation during examination. Under that standard, it was proper for the Board to construe "user computer" to encompass the mainframes and minicomputers of the cited prior art." Id.

for determining invalidity. <u>Ethicon Inc. v. Quigg</u>, 849 F.2d 1422, 1428-9, 7 USPQ2d 1152, 1157 (Fed. Cir. 1988).

Thus, the Office is required by statute, case law, and the MPEP to utilize the "broadest reasonable interpretation consistent with the specification" standard during reexamination proceedings.

Here, the examiner interpreted the claim term "base station" reasonably broad as <u>not</u> requiring a mode where the base station is precluded from initiating contact with the remote terminal for the purposes of minimizing power consumption at the remote terminal, consistent with the Patent Owner's specification, which fails to set forth any special definitions for the term "base station" as discussed extensively above. Furthermore, the Patent Owner had the opportunity to amend the claims during the current proceeding to explicitly recite a feature that the Patent Owner argues should be read into the claims. Yet the Patent Owner declined to explicitly recite this feature.

Nonetheless, the claim construction ruling by Judge Robinson does <u>not</u> appear to be in agreement with the special definitions advanced by the Patent Owner in the Reply and in the Interview Summary. For example, the statements cited by the Patent Owner on page 24 of the Reply at most indicate that the district court definition includes a unit that "cannot initiate data communications with a remote terminal unit." Nothing is stated about the remote unit minimizing power consumption. The court's statement that the "question you must answer in

connection with the asserted claims is whether the accused products, in their power save mode, meet each limitation of such claims" (p. 24 of the Reply) refers to a special mode that an <u>accused device</u> operates under, during which time it operates in a manner that allegedly infringes the claims of the Tymes patent. It does not follow that the claims of the Tymes patent must therefore be interpreted to require the power saving mode of the accused device. In contrast, regarding the <u>actual</u> language of the claims in the Tymes patent under reexamination, the court simply states that a "base station" means "a unit that transfers data between a remote terminal unit and a central computer, but which cannot initiate data communications with a remote terminal unit." <u>Id</u>. Thus, the court fails to construe the term "base station" to require minimization of power consumption.

Even if Limitations from the Specification Should Be Read into the Claims of the Tymes Patent, Which They Should Not, the Applied 102 Art of Record, Koohgoli, Still Teaches These Unclaimed Limitations.

Although the unclaimed limitation "base station unit cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption" should not be read into the claim term "base station" as discussed above, U.S. Patent No. 4,771,448 (the "Koohgoli" patent) nonetheless teaches a feature. Specifically, Koohgoli teaches that the remote terminals (portables 16) must register with the base station before the base station communicates with them (col. 10, ll. 16-68). That is, the base station receives registration signals transmitted by the remote terminals in order to develop a constantly updated list of

remote terminals that are currently within radio reach of the base station (i.e., "resident portables"). <u>Id</u>. This is a <u>fundamental</u> aspect of cellular system design, where a cellular telephone or data terminal must first send out a registration signal so that a particular base station serving the area where the cellular telephone is currently located will efficiently know that a particular cellular telephone is there. A primary example is an incoming call to a particular cellular telephone. In order to complete a call to a particular cellular telephone, that cellular telephone must have initiated contact (registered with) a particular base station before the base station initiates data communications (incoming call) to that cellular telephone. <u>Id</u>. Thus, incoming calls can be efficiently attempted to the cellular telephone via just one or two base stations. The usual term for a list of cellular devices currently registered to a particular base station is more typically called either the <u>home location register</u> (for cellular devices that currently within reach of "home" base stations) or the <u>visiting location register</u> (for cellular devices that are roaming into reach of a guest base station).

Conclusion

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination

proceedings. The provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings "will be conducted with special dispatch within the Office."

Extensions of time in reexamination proceedings are provided for in 37 CFR 1.550(c). A request for extension of time must be filed on or before the day on which a response

to this action is due, and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). The mere filing of a request will not effect any extension of time. An extension of time will be granted only for sufficient cause, and for a reasonable time specified.

The Patent Owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the Tymes patent (U.S. Patent No. 5,029,183) throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282, and 2286.

A complete response should be made in response to this Office Action since the next Office Action is expected to be a Final Action. Thus, in order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office Action. Submissions after the next Office Action, which is intended to be a Final Action, will be governed by the requirements of 37 C.F.R. 1.116(b), which will be strictly enforced. Any amendment after a Final Action must include "a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented" in order to be considered. See MPEP § 2260.

All correspondence relating to this ex parte reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop "Ex Parte Reexam" ATTN: Central Reexamination Unit Commissioner for Patents P. O. Box 1450 Alexandria VA 22313-1450

By **FAX** to:

(571) 273-9900 Central Reexamination Unit

By hand to:

Customer Service Window Central Reexamination Unit Randolph Building, Lobby Level 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be

directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

Róland G. Foster Central Reexamination Unit, Primary Examiner Electrical Art Unit 3992 (571) 272-7538

Conferees:

MARK J. REINHART SPRE-AU 3992 CENTRAL REEXAMINATION UNIT

COTT L. WEAVER **CRU EXAMINER-AU 3992**

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Substitute for form 1449/PTO	Complete if Known		
SECOND SUPPLEMENTAL	Application Number	90/007,617	
INFORMATION DISCLOSURE	Filing Date	July 6, 2005	
	First Named Inventor	L. Tymes	
STATEMENT BY APPLICANT	Art Unit	3992	
(Use as many sheets as necessary)	Examiner Name	Roland G. Foster	
Sheet 1 of 1	Attorney Docket Number	2319.065REX0	

Examiner			U.S. PATENT DO			
Initials"	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines,	
	L	Number-Kind Code ^{2 (If Known)}			Where Relevant Passages or Relevant Figures Appea	
RF	US25	4,344,171	08-10-1982	LIN, et al.		
	US26	4,654,654	03-31-1987	BUTLER, et al.		
	US27	4,679,244	07-07-1987	KAWASAKI, et al.		
	US28	4,811,379	03-07-1989	GRANDFIELD		
	US29	4,882,770	11-21-1989	MIYAHIRA, et al.		
-	US30	4,940,963	07-10-1990	GUTMAN, et al.		
_V	US31	4,979,168	12-18-1990	COURTOIS, et al.		
	US32	5,020,093	05-28-1991	PIREH		
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Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	76
RF	FP11	EP 0 303 020	02-15-1989	UEHARA		<u> </u>
	FP12	EP 0 314 217	05-03-1989	COURTOIS, et al.		┣──┥
	FP13	EP 0 319 219	06-07-1989	MURAI, et al.		├ ──┤
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SECOND SUPPLEMENTAL			ENTAL.	Application Number	90/007,617
INFORM	INFORMATION DISCLOSURE		Filing Date	July 6, 2005	
STATE	MENT F	V AD		First Named Inventor	L. Tymes
<u>-</u>	STATEMENT BY APPLICANT (Use as many sheets as necessary)		Art Unit	3992	
			Examiner Name	Roland G. Foster	
Sheet	1	of	1	Attorney Docket Number	2319.065REX0

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Examiner Initials*	Cite No. ¹	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue	T ²
RF	NPL33	LIN, Shu and COSTELLO, Daniel J., Jr., "ERROR CONTROL CODING: Fundamentals and Applications," Prentice-Hall, Inc., Englewoods Cliffs, NJ, 1983, pp. 458-465.	
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	NPL35		
	NPL36		
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	NPL39		
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Signature	/Roland Foster/	Considered	02/03/2007
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Substitute for form 1449/PTO	Complete	if Known
	Application Number	90/007,617
INFORMATION DISCLOSURE	Filing Date	July 6, 2005
STATEMENT BY APPLICANT	First Named Inventor	L. Tymes
(Use as many sheets as necessary)	Art Unit	2616
	Examiner Name	Hanh Nguyen
Sheet 1 of 1	Attorney Docket Number	2319.065REX0

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Examiner Initials	Cite No. ¹	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines,		
	140.	Number-Kind Code ^{2 ((fKaova)}	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages		
RF	US24	4,449,248	05/15/1984	LESLIE, et al.	or Relevant Figures Appear		
	US25		03/13/1904				
	US26						
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Examiner	Cite	For For	REIGN PATENT D	DCUMENTS		
Initials*	No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns,	
		Country Code ¹ Number ⁴ Kind Code ⁴ (if known)		Applicant of Cited Document	Lines, Where Relevant Passages or Relevant Figures	
RF	FP4	DE 3304451	10/1984	KAPPELLER	Appear	T
	FP5	EP 0 131 662	01/23/1985	RODMAN		X
	FP6	JP 53-108310	09/21/1978	HORUMESU, et al.	Domt i al mus	
	FP7	JP 55-136733	10/24/1980	HARUO, et al.	Partial Tra Abstract Tr	nslatio
	FP8	JP 61-071738	04/12/1986	KENJI, et al.	mostract II	
	FP9	JP 61-270930	12/01/1986	HIROSHI		
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				Application Number	90/007,617	
INFORMATION DISCLOSURE				Filing Date	July 6, 2005	
STATEMEN	STATEMENT BY APPLICANT			First Named Inventor	L. Tymes	
(Use	as many s	sheets a	is necessary)	Art Unit	2616	
		Examiner Name	Hanh Nguyen			
Sheet	1	of	1	Attorney Docket Number	2319.065REX0	

			NON PATENT LITERATURE DOCUMENTS	
Exarr Initia		Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T ²
RI	F	NPL26	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.	
		NPL27	Certified Translation of German Patent No. DE 3304451, 21 pages (October 18, 1984 - Date of Publication of Patent).	
		NPL28	English Language Abstract of Japanese Patent Publication No. JP 53-108310, data supplied by espacenet, 1 page (September 21, 1978 - Date of Publication).	
	1	NPL29	English Language Abstract of Japanese Patent Publication No. JP 55-136733, data supplied by espacenet, 1 page (October 24, 1980 - Date of Publication).	
	1	NPL30	English Language Abstract of Japanese Patent Publication No. JP 61-071738, data supplied by espacenet, 1 page (April 12, 1986 - Date of Publication).	
	1	NPL31	English Language Abstract of Japanese Patent Publication No. JP 61-270930, data supplied by espacenet, 1 page (December 1, 1986 - Date of Publication).	
V	N	NPL32	English Language Abstract of Japanese Patent Publication No. JP 63-198438, data supplied by espacenet, 1 page (August 17, 1988 - Date of Publication).	
	N	VPL33		
	N	JPL34		

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Substitute for form 1449/PTO	Complete if Known		
	Application Number	90/007,617	
INFORMATION DISCLOSURE	Filing Date	July 6, 2005	
STATEMENT BY APPLICANT	First Named Inventor	L. Tymes	
(Use as many sheets as necessary)	Art Unit	2616	
	Examiner Name	Hanh Nguyen	
Sheet 1 of 1	Attorney Docket Number	2319.065REX0	

Examiner	Cite		U.S. PATENT D			
Initials	No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines,	
		Number-Kind Code ^{2 (If Kanna)}		Applicant of Cited Document	Where Relevant Passag	
12.6.1.	USI 3,251,034		05/10/1966	GOODE, et al.		
	US2	3,959,589	05/25/1976	von ROESGEN, et al.		
	US3	4,022,973	05/10/1977	STACKHOUSE, et al.		
	US4	4,197,500	04/08/1980	KLEIN, et al.		
	US5	4,418,277	11/29/1983	TREMMEL, et al.	<u> </u>	
	US6	4,460,120	07/17/1984	SHEPARD, et al.		
	US7	4,477,809	10/16/1984	BOSE		
	US8	4,661,902	04/28/1987	HOCHSPRUNG, et al.	1	
	US9	4,673,805	06/16/1987	SHEPARD, et al.		
	US10	4,704,517	11/03/1987	CAMPISI, et al.		
	<u>US11</u>	4,736,095	04/05/1988	SHEPARD, et al.		
	US12	4,758,717	07/19/1988	SHEPARD, et al.		
	US13	4,792,947	12/20/1988	TAKIYASU, et al.	†	
	US14	4,807,222	02/21/1989	AMITAY		
-+-+	US15	4,807,261	02/21/1989	JOHNSON		
	US16	4,857,716	08/15/1989	GOMBRICH, et al.		
	US17	4,910,794	03/20/1990	MAHANY		
	US18	4,928,096	05/22/1990	LEONARDO, et al.		
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	US20	4,995,053	02/19/1991	SIMPSON, et al.		
	US21	5,006,996	04/09/1991	NAKAMURA, et al.		
	US22	5,010,241	04/23/1991	BUTTERWORTH		
	US23	5,046,066	09/03/1991	MESSENGER		
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Examiner Initials*	Cite No.'	Foreign Patent Document Country Code ¹ Number ⁴ Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentce or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
(C, r)	FP1	EP 0075310	03/30/1983	Ulrich HEYLAND, et al.	Appeal	<u> </u>
	FP2	EP 0 131 663	01/23/1985	Takashi OKADA, et al.		┣—
4	FP3	WO 88/04496	06/16/1988	Allyson REED, et al.	<u> </u>	┢──
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document by the appropriate symbols as indicated on the document under WIPO Standard S1.10 II possible. Applicant is to prece a cricic main field in English language Translation Is attached. This collection of information Is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. Page 163 of 341

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Substitute for form	n 1449/P1	ю		Co	mplete if Known
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				Filing Date	July 6, 2005
STATEMENT BY APPLICANT		First Named Inventor	L. Tymes		
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				Examiner Name	Hanh Nguyen
Sheet	1	of	3	Attorney Docket Number	2319.065REX0

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Examiner	Cite	NON PATENT LITERATURE DOCUMENTS	
Initials*	No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	Т
RLT.	NPL1	Leonard KLEINROCK, et al., "Packet Switching in Radio Channels: Part I - Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics", IEEE Transactions on Communications, Vol. Com-23., No. 12, December 1975, pp. 1400-1416.	
	NPL2	B.S. TSYBAKOV, et al., "Packet Transmission in Radio Networks", Reprinted with permission from Problemy Peredacti Informaisii, vol. 21, no. 1, pp. 80-101, Jan March 1985, pp. 330-341.	
	NPL3	Norman ABRAMSON, "The Throughput of Packet Broadcasting Channels", IEEE Transactions on Communication, January 1977, pp. 117-128.	
	NPL4	J.M. WOZENCRAFT, et al., "Coding for Two-Way Channels", Research Laboratory of Electronics and Lincoln Laboratory, Massachusetts Institute of Technology, pp. 11-25.	
	NPL5	Simon S. LAM, et al., "Packet Switching in a Multiaccess Broadcast Channel: Dynamic Control Procedures", Transactions on Communications, Vol. Com - 23, No. 9, September 1975, pp. 891-904.	
	NPL6	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.	
	NPL7	J.J. SPILKER, Jr. Ph.D., "Digital Communications by Satellite", 1977, pp. 449- 450, 452-453 and 468.	_
	NPL8	John M. WOZENCRAFT, et al., "Coding For Two-Way Channels", Technical Report 383, January 3, 1961, pp. 1-16.	_
	NPL9	Lawrence G. ROBERTS, "Extensions of Packet Communication Technology to a Hand Held Personal Terminal", Spring Joint Computer Conference, 1972, pp. 295-298.	
•	NPL10	Mario TOKORO, et al., "Acknowledging Ethernet", pp. 1-6.	_
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*EXAMINER: Initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. "Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (07-05)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form	Substitute for form 1449/PTO			Complete if Known		
				Application Number	90/007,617	
INFORMA				Filing Date	July 6, 2005	
STATEME	NT B	Y AP	PLICANT	First Named Inventor	L. Tymes	
(Use	as many	sheets a	is necessary)	Art Unit	2616	
	<u> </u>			Examiner Name	Hanh Nguyen	
Sheet	2	of	3	Attorney Docket Number	2319.065REX0	

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Evening		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	Ť
RC, F.	NPL11	Robert E. KAHN, et al., "Advances in Packet Radio Technology", Proceeding of the IEEE, Volume 66, Number 11, pp. 1468-1496.	
	NPL12	R. BINDER, et al., "ALOHA Packet Broadcasting - A Retrospect", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19 - 22, 1975, pp. 203-215.	
	NPL13	Norman ABRAMSON, "The ALOHA SYSTEM - Another Alternative for Computer Communications", AFIPS Conference Proceedings, Vol. 37, 1970 Fall Joint Computer Conference, Nov. 17 - 19, 1970, pp. 281-285.	
	NPL14	Richard BINDER, et al., "The Alohanet Menehune - Version 11", Sponsored by Advanced Research Projects Agency, ARPA Order No. 1956, September 1974, pp 1-55.	
	NPL15	Andrew S. TANENBAUM "Computer Networks" 2 nd Ed., Ch. 3, 1988, pp., 182- 193.	
	NPL16	"Digital Terminals for Packet Broadcasting", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 254-261.	
	NPL17	MSI PRT Portable Radio Terminal, 2 pages.	
	NPL18	Norman ABRAMSON, "Packet Switching with Satellites", AFIPS Conference Proceedings, 1973 National Computer Conference and Exposition, Volume 42, June 4-8, 1973, pp. 695-702.	
	NPL19	Leonard KLEINROCK, et al., "Random Access Techniques for Data Transmission Over Packet-Switched Radio Channels", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 187- 201.	
	NPL20	The Vectran VR1100 System: Your Link to Productivity, 11 pages.	
aminer gnature MINER: Initia		Date Considered 2/3/07	_

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the including gathering, preparing, and submitting the complete dapplication form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for	r form 1449/PT	o			demark Office; U.S. DEPARTMENT OF COMMER information unless it contains a valid OMB control num mplete if Known
				Application Number	90/007,617
INFORMATION DISCLOSURE				Filing Date	July 6, 2005
STATEMENT BY APPLICANT (Use as many sheets as necessary)				First Named Inventor	L. Tymes
			s necessary)	Art Unit	2616
				Examiner Name	Hanh Nguyen
Sheet	3	of	3	Attomey Docket Number	2319.065REX0

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	T ²
Rei	NPL21	Memorandum Order, Symbol Technologies, Inc. v. Proxim Incorporated, CA No. 01-801-SLR, July 30, 2003, pp. 1-7.	
	NPL22	Trial Transcript, Volume E, Symbol Technologies, Inc. V. Proxim Incorporated, C.A. No. 01-801-SLR, September 12, 2003, pp. 1055, 1056, 1092, 1208.	
	NPL23	English Abstract of EP0075310A: Circuit Arrangement for Telecommunication Exchanges, Especially Telephone Exchanges, with Devices for Securing the Transmission of Coded Signals.	
	NPL24	J.S.J. DAKA, et al., "A High Performance Broadcast File Transfer Protocol", SIGCOMM '88 Symposium, Communications Architectures & Protocols, 1988, pp. 274-281.	
•	NPL25	S. CHOW, et al., "A Spread Spectrum Modem for Reliable Data Transmission in the High Frequency Band", Second Conference on HF Communication Systems and Techniques, February 15-17, 1982, pp. 125-130.	
	NPL26		
	NPL27		
	NPL28		
	NPL29		

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Signature		Date	
		Considered	7R1/n
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U.S. Departr	nent of Co	ommerce, Patent an	d Trademark Offic	e	Atty. Docket	No.	Re-Exam Con No
					M-16056-RE		Unassigned
INFO	RMATIO	N DISCLOSURE S	TATEMENT BY	APPLICANT	Applicant(s)	····	
		(Use several shee	s if necessary)		LaRoy Tymes		
					Re-Exam Date		Group
					July 6, 2005		Unassigned
			U.S. P	atent Documents	1		
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
RF	AA	4,479,261	23 Oct. 1984	Oda et al.			
	AB	4,720,710	19 Jan. 1988	Akahori et al.			
V	AC	4,777,488	11 Oct. 1988	Carlman, Jr. et a	1.	· · · · · · · · · · · · · · · · · · ·	_
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RF	AL			ologies, Inc. v Proxi	· · · · · · · · · · · · · · · · · · ·		801-SLR; pages 1-
	AM	Binder et al. "ALC Proceedings Volu	DHA Packet Broad me 44 (May 19-22,	casting: A Retrospec 1975), pages 203-2	ct" AFIPS Nation 15.	nal Computer	Conference
	AN	Fralick et al. "Dig Proceedings Volu	ital Terminals for P me 44 (May 19-22,	acket Broadcasting' 1975), pages 253-20	' AFIPS Nationa 62.	l Computer C	Conference (NCC)
\mathbf{V}	AO	Kleinrock et al. "F Their Throughput December 1975, p	Delay Characterist	Radio Channels: Pa ics," IEEE Transacti	rt I – Carrier Ser ions on Commur	nse Multiple-A	Access Modes and ume 23, No. 12,
	АР						
							
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Reexamination			

Requester	Correspondence Address:	Patent Owner	I Third Party	
MACPHERSC 2033 GATEW SUITE 400 SAN JOSE, C				

	r.g.f. (examiner initials)		1/31/07 (date)
Ca	ase Name		Director Initials
Symbol Technologies, Inc. v. Y Delaware, 1:05cvī	Symbol Technologies, Inc. v. Ydi Wireless Inc. et al., U.S. District - Delaware, 1:05cv755, voluntary dismissal		- for
Symbol Technologies, Inc. v. Inter Deleaware, 1:05cv	mec Technologies Corp., U.S. District - 147, voluntary dismissal		
Symbol Technologies v. Hand Delaware, 1:03cv1	Held Products, et al., U.S. District - 02, voluntary dismissal		
Symbol Technologies v. Proxim Inc post-judgn	c., U.S. Dicstrict - Delaware, 1:01cv801, nent settlement	T	T

COPENDING OFFICE PROCEEDINGS				
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Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination
	90/007,617	5029183
	Examiner	Art Unit
	Roland G. Foster	3992



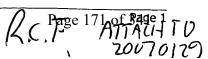
Application/Control No.	Applicant(s)/Patent under Reexamination
90/007,617	5029183
Examiner	Art Unit
Roland G. Foster	3992

SEARCHED				
Class	Subclass	Date	Examine	
			<u>-</u>	

INTERFERENCE SEARCHED					
Class	Subclass	Date	Examiner		

SEARCH NOT (INCLUDING SEARCH	SEARCH NOTES (INCLUDING SEARCH STRATEGY)				
DATE EXMR					
EAST Text Search - see search history printout 455/435 (to 01/01/1992) 455/435.1 (to 01/01/1992)	2/3/2007	RGF			

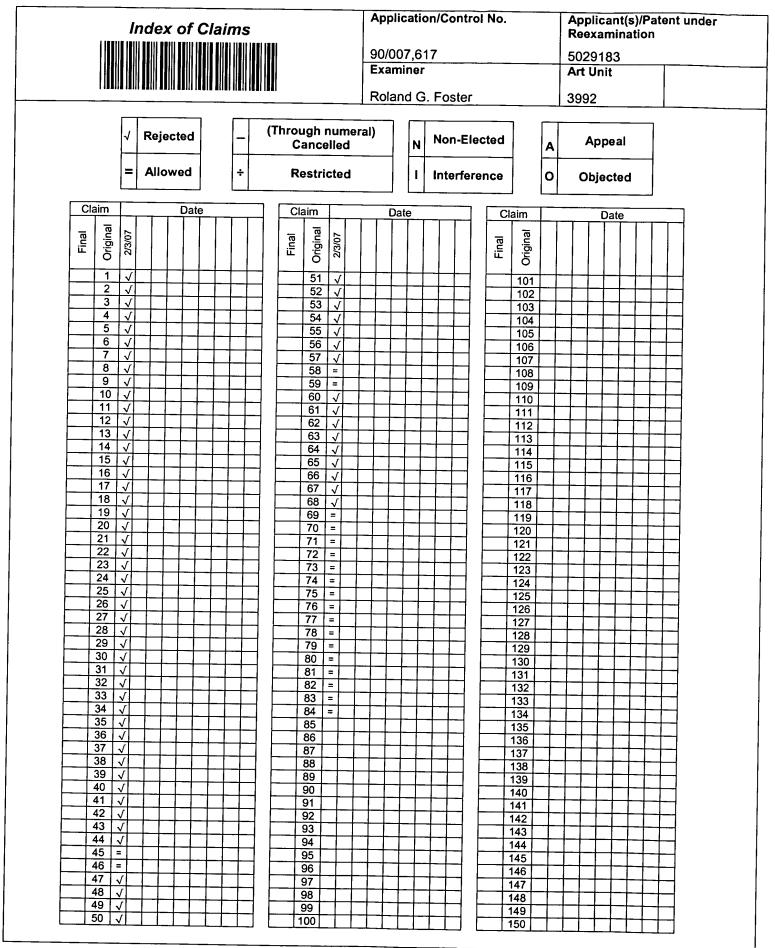
Ref	Hits	Search Query	DBs	Default	Diversis	Time Chr
#				Operator	Plurals	Time Stamp
L1	2045		US-PGPUB; USPAT	OR	OFF	2007/02/03 18:33
L2	49	1 and @ad<"19910101"	US-PGPUB; USPAT	OR	ON	2007/02/03 18:33
L3	62	1 and @ad<"19920101"	US-PGPUB; USPAT	OR	ON	2007/02/03 18:33
S1	7	(base adj station) near3 cannot near3 initiate\$ near3 communication\$	US-PGPUB; USPAT	OR	ON	2007/01/26 11:29
S2	418	(base adj station) near3 initiate\$ near3 communication\$	US-PGPUB; USPAT	OR	ON	2007/01/26 11:31
S3	2890	(base adj station) same (power near2 (low or save))	US-PGPUB; USPAT	OR	ON	2007/01/26 11:32
S4	1311	(base adj station) near15 (power near2 (low or save))	US-PGPUB; USPAT	OR	ON	2007/01/26 11:32
S5	808	(base adj station) near5 (power near2 (low or save))	US-PGPUB; USPAT	OR	ON	2007/01/26 11:47
S6	2129	(bar adj code) and (base adj station)	US-PGPUB; USPAT	OR	ON	2007/01/26 11:48
S7	79	S6 and (save near3 power)	US-PGPUB; USPAT	OR	ON	2007/01/26 11:52
S8	2	(("4612637") or ("4479261")).PN.	US-PGPUB; USPAT	OR	OFF	2007/01/26 15:27
S9	4283	aloha	US-PGPUB; USPAT	OR	ON	2007/01/26 11:53
S10	786	aloha and satellite	US-PGPUB; USPAT	OR	ON	2007/01/26 12:20
S11	997	aloha and cellular	US-PGPUB; USPAT	OR	ON	2007/01/26 12:08
S12	1	("5029183").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/26 12:04
S13	77	aloha and ((bar adj code) or "bar-cod")	US-PGPUB; USPAT	OR	ON	2007/01/26 12:05
S14	77	aloha and ((bar adj code) or "bar-code")	US-PGPUB; USPAT	OR	ON	2007/01/26 12:06
S15	102	aloha and wlan	US-PGPUB; USPAT	OR	ON	2007/01/26 12:09
S16	186	aloha and (wireless near2 (local adj area))	US-PGPUB; USPAT	OR	ON	2007/01/26 12:10
S17	855	aloha and (data near2 network)	US-PGPUB; USPAT	OR	ON	2007/01/26 12:10
S18	808	aloha and (base adj station)	US-PGPUB; USPAT	OR	ON	2007/01/26 12:29



S19	62	(wireless adj network) and (polling near2 (base adj station))	US-PGPUB USPAT	; OR	ON	2007/01/26 12:39
S20	15	("3641433" "4247908" "4291409" "4409470" "4460120" "4475208" "4639914" "4672658" "4673805" "4736095" "4740792" "4758717" "4789983" "4829540" "4850009"). PN.	US-PGPUB, USPAT; USOCR	; OR	ON	2007/01/26 12:31
S21	40	("3439320" "3715570" "3803571" "3848112" "3891980" "3898619" "4121574" "4209787" "4227258" "4274083" "4303910" "4337462" "4359631" "4411016" "4445028" "4456793" "4471165" "4471345" "4473884" "4476381" "4481382" "4483683" "4486624" "448035" "4489313" "4491725" "4503288" "4508935" "4519066" "4523087" "4528444" "4569421" "4588881" "4593155" "4598275" "4625276" "4628193" "4634810" "4886624"). PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/26 12:34
S22	402	receiver near3 polls	US-PGPUB; USPAT	OR	ON	2007/01/26 13:02
S23	107	polls adj2 (base adj station)	US-PGPUB; USPAT	OR	ON	2007/01/26 13:04
S24	22212	wireless and pull	US-PGPUB; USPAT	OR	ON	2007/01/26 13:04
S25	323	wireless and (pull near5 base)	US-PGPUB; USPAT	OR	ON	2007/01/26 13:05
S26	4681	wireless and (time adj window)	US-PGPUB; USPAT	OR	ON	2007/01/26 13:05
S27	3191	wireless and (time adj window) and power	US-PGPUB; USPAT	OR	ON	2007/01/26 13:06
S28	126	wireless and ((time adj window) near5 receive) and power	US-PGPUB; USPAT	OR	ON	2007/01/26 13:06
S29	157	wireless and ((time adj window) near5 receive)	US-PGPUB; USPAT	OR	ON	2007/01/26 13:08
S30	1102487	delay adj after ad transmission	US-PGPUB; USPAT	OR	ON	2007/01/26 13:08
S31	1099374	(time adj (delay or window)) adj after ad transmission	US-PGPUB; USPAT	OR	ON	2007/01/26 13:08
S32	33	(time adj (delay or window)) adj after adj transmission	US-PGPUB; USPAT	OR	ON	2007/01/26 13:09
S33	56	(time adj (delay or window)) adj2 after adj transmission	US-PGPUB; USPAT	OR	ON	2007/01/26 13:10

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S34	7	(time adj (delay or window)) adj2 after adj transmitting	US-PGPUB; USPAT	OR	ON	2007/01/26 13:11
S35	2905	(time adj (delay or window)) and (bar adj code)	US-PGPUB; USPAT	OR	ON	2007/01/26 13:12
S36	2182	(time adj (delay or window)) and (bar adj code) and power	US-PGPUB; USPAT	OR	ON	2007/01/26 13:12
S37	2392	(time adj (delay or window)) and (data adj network) and power	US-PGPUB; USPAT	OR	ON	2007/01/26 13:12
S38	159	(time adj (delay or window)) and (wireless adj data adj network) and power	US-PGPUB; USPAT	OR	ON	2007/01/26 14:23
S39	10623	receiver same (power near (low or sav\$))	US-PGPUB; USPAT	OR	ON	2007/01/26 14:29
S40	795	receiver same (power near (low or sav\$) near mode)	US-PGPUB; USPAT	OR	ON	2007/01/26 14:41
S41	1	polling adj pager	US-PGPUB; USPAT	OR	ON	2007/01/26 14:42
S42	3	pager adj2 polls	US-PGPUB; USPAT	OR	ON	2007/01/26 14:42
S43	3	pager adj2 pulls	US-PGPUB; USPAT	OR	ON	2007/01/26 14:42
S44	2463	(time adj (window or period)) near5 transmi\$ near5 receiv\$	US-PGPUB; USPAT	OR	ON	2007/01/26 15:29
S45	1052	(time adj (window or period)) near3 transmi\$ near3 receiv\$	US-PGPUB; USPAT	OR	ON	2007/01/26 15:41
S46	117	scheduled adj data adj transmission	US-PGPUB; USPAT	OR	ON	2007/01/26 15:45
S47	110	raychaudhuri\$.in.	US-PGPUB; USPAT	OR	ON	2007/01/26 15:46
S48	1	("4774707").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/26 15:47
S49	75	("3647975" "4063220" "4210780" "4234952" "4320500" "4332027" "4337465" "4380761" "4395710" "4408300" "4412326" "4476467" "4504946" "4514843" "4536874" "4542502" "4543574" "4550397" "4560984" "4592049" "4594706" "4598285" "4612637" "4641304" "4677615").PN. OR ("4774707").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/26 16:17
S50	1991	reservation adj protocol	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/26 16:17
S51	5	S50 and @ad<"19910101"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:29

<u> </u>						
S52	140	(conserve near5 power) near15 (base adj station)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:48
S53	5	S52 and @ad<"19910101"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:59
S54	58	low adj power adj base adj station	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:56
S55	35322	(mobile adj station) or (cellular telephone) near5 (registration or registers)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:59
S56	1166	S55 and @ad<"19910101"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 10:59
S57	8948	((mobile adj station) or (cellular telephone)) near5 (registration or registers)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 11:01
S58	636	S57 and @ad<"19910101"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 11:02
S59	1704	((mobile adj station) or (cellular adj telephone) or (radio adj telephone) or radiotelephone) near5 (registration)	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 11:02
S60	30	S59 and @ad<"19910101"	US-PGPUB; USPAT; USOCR	OR	ON	2007/01/29 11:18
S61	1	("4771448").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/29 14:08
S62	1	("5029138").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/29 14:09
S63	1	("5029183").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/03 18:33
S64	1	("4771448").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/03 13:27
S65	1	("4,777,488").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/03 11:01
S66	1	("4,332,027").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/03 13:49
S67	1	("4,587,661").PN.	US-PGPUB; USPAT	OR	OFF	2007/02/03 13:49





Robert Greene Sterne Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michele A. Cimbala Michael B. Ray Robert E. Sokohl Fric K. Steffe Michael Q. Lee John M. Covert Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Judith U. Kim Patrick E. Garrett

Jeffrey T. Helvey Eldora L. Ellison Thomas C. Fiala Donald R Banowit Peter A. Jackman Jeffrey S. Weaver Brian J. Del Buono Mark Fox Evens Edward W. Yee Vincent L. Capuano Virgil Lee Beaston Theodore A. Wood Elizabeth J. Haanes Joseph S. Ostroff Daniel A. Klein Jason D. Eisenberg Michael D. Specht April 9, 2007 Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cynthia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Laura A. Vogel Bryan S. Wade Bashir M.S. Ali Shannon A. Carroll Anbar F. Khal Michelle K. Holoubek Marsha A. Rose Young Tang

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Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Art Unit 3992

Attn: Mail Stop Ex Parte Reexam

Re: Reexamination of U.S. Patent No. 5,029,183 Reexam Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: LaRoy TYMES Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Reply to Office Action in *Ex Parte* Reexamination;
- 2. Certification of Service on Third Party Requestor of Reply to Office Action; and
- 3. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Röbert Sokohl Attorney for Patent Owner Registration No. 36,013

RES/LAG/mlb Enclosures 662358_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183 LaRoy TYMES

Reexam Control No.: 90/007,617

Filed: July 6, 2005

For: Packet Data Communication Network Confirmation No.: 7501 Art Unit: 3992 Examiner: Foster, Roland G. Atty.Docket: 2319.065REX0

Reply to Office Action in Ex Parte Reexamination

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the Office Action in *Ex Parte* Reexamination dated February 9, 2007, the Patent Owner submits the following Listing of Claims and Remarks.

It is not believed that extensions of time or other fees are required. However, if any fees are necessary to prevent abandonment of this application, then such fees are hereby petitioned and hereby authorized to be charged to our Deposit Account No. 19-0036.

Listing of the Patent Claims

- 2 -

A listing of the status of each claim under reexamination is provided below.

1. (original patent claim) A method of transmitting data packets from one of a plurality of remote terminal units to a base station, comprising the steps of:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

2. (original patent claim) A method according to claim 1 wherein said step of transmitting is by an RF signal, and said step of receiving includes receiving an RF signal.

3. (original patent claim) A method according to claim 2 wherein said RF signal is of the spread spectrum type.

4. (original patent claim) A method according to claim 3 wherein said spread spectrum RF signal is of the direct sequence type.

5. (original patent claim) A method according to claim 1 wherein said transmitted data packet and said acknowledge signal each include identification of said remote terminal unit.

6. (original patent claim) A method according to claim 5 wherein said unit is one of a plurality of remote stations associated with the transmitter of said acknowledge signal.

- 3 -

7. (original patent claim) A method according to claim 6 wherein said remote stations are hand-held data-gathering units which include manual control elements.

8. (original patent claim) A method according to claim 6 wherein at least some of said remote stations include bar-code reading devices.

9. (original patent claim) A method according to claim 1 wherein said stations each include a processor executing instructions stored in a memory and said data packet and said acknowledge signal are both also stored in said memory in binary format.

10. (original patent claim) A method according to claim 9 wherein said data packet is encoded by said processor executing instructions, and said acknowledge signal is decoded by said processor executing instructions.

11. (original patent claim) A method according to claim 10 wherein said transmitted data packet and said acknowledge signal are RF signals of the direct sequence spread spectrum type.

12. (original patent claim) A method according to claim 11 wherein said acknowledge signal is transmitted by a second station which is one of a plurality of like second stations, and each one of said second stations is coupled for communication to a central computer. 13. (original patent claim) A method according to claim 12 including the step of sending data packets to said central computer from said second stations by a serial communications link.

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14. (original patent claim) A method according to claim 1 wherein said acknowledge signal is transmitted by a second station which is one of a plurality of said second stations physically spaced from one another, and there are a plurality of said units for each said second station.

15. (original patent claim) A method according to claim 14 wherein each one of said units is identified by a unique code and said transmitted data packet includes said unique code, and said acknowledge signal also includes said unique code.

16. (original patent claim) A method according to claim 1 including the step of receiving at said unit prior to said step of transmitting said data packet to detect transmission by other like units.

17. (original patent claim) A method according to claim 16 wherein there are a plurality of said units, each identified by a unique code transmitted with said data packet and with said acknowledge signal.

18. (original patent claim) A method according to claim 17 wherein said units each include a processor executing instructions stored in a memory, and said acknowledge signal is first loaded to said memory and then decoded.

19. (original patent claim) A method according to claim 18 wherein at least some of said units include hand-held bar-code scanners or readers.

20. (original patent claim) A method according to claim 19 wherein at least some of said units include keyboard inputs and visual displays scanned by said processor.

21. (original patent claim) A system for transmitting data packets from one of a plurality of first stations to a second station, comprising:

(a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;

(b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations.

22. (original patent claim) A system according to claim 21 wherein said transmitted data packet is sent by an RF signal, and said acknowledge signal is an RF signal.

23. (original patent claim) A system according to claim 22 wherein said RF signal is of the spread spectrum type.

24. (original patent claim) A system according to claim 23 wherein said spread spectrum RF signal is of the direct sequence type.

25. (original patent claim) A system according to claim 21 wherein said transmitted data packet includes identification of said first station, and said acknowledge signal includes identification of said first station.

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26. (original patent claim) A system according to claim 25 wherein said first station is one of a plurality of remote stations associated with said second station.

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27. (original patent claim) A system according to claim 26 wherein said remote stations are hand-held data-gathering units which include manual control elements.

28. (original patent claim) A system according to claim 27 wherein said units each include a processor executing instructions stored in a memory.

29. (original patent claim) A system according to claim 28 wherein at least some of said units include bar-code scanners.

30. (original patent claim) A system according to claim 29 wherein at least some of said units include keyboard inputs and visual displays.

31. (original patent claim) A system according to claim 30 wherein said transmitted data packet and said acknowledge signal are RF signals of the direct sequence spread spectrum type.

32. (original patent claim) A system according to claim 31 wherein there are a plurality of said second stations, and a plurality of said first stations for each said second station.

33. (original patent claim A system according to claim 32 wherein all of said plurality of second stations are coupled to a host station by a communication link.

34. (original patent claim) A system according to claim 33 wherein each of said second stations includes a decoder for decoding the data packet sent by a first station to produce digital data to send to said host station.

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35. (original patent claim) A system according to claim 21 wherein the transmitter at said first station receives prior to transmitting said data packet to detect transmission by other stations.

36. (original patent claim) A system according to claim 35 wherein there are a plurality of said first stations, each identified by a unique code transmitted with said data packet and with said acknowledge signal.

37. (original patent claim) A system according to claim 36 wherein said first stations each include a processor executing instructions stored in a memory, and said acknowledge signal is first loaded to said memory and then decoded.

38. (original patent claim) A system according to claim 37 wherein at least some of said first stations include hand-held bar-code scanners.

39. (original patent claim) A system according to claim 38 wherein at least some of said units include keyboard inputs and visual displays scanned by said processor.

40. (original patent claim) A method of data transmission between a plurality of terminals and a base station, comprising the steps of:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal;

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(c) receiving said acknowledgement at said one terminal during said predetermined time window.

41. (original patent claim) A method according to claim 40 including the step of first receiving at said one terminal to detect transmission by another of said plurality of terminals, before transmitting said data packet.

42. (original patent claim) A method according to claim 40 wherein said transmitting is by wireless RF.

43. (original patent claim) A method according to claim 42 wherein said RF is modulated by the spread spectrum technique.

44. (original patent claim) A method according to claim 43 wherein said spread spectrum technique employs a sequence of frequency shifts between two frequencies.

45. (original patent claim) A method according to claim 44 including the steps of forming said data packet in a memory by expanding a multi-byte packet to create an expanded packet then producing in said memory an exclusive-OR of said expanded packet and a fixed pseudorandom sequence of bits.

46. (original patent claim) A method according to claim 45 wherein said multibyte packet includes the results of reading a bar code symbol. 47. (original patent claim) A method according to claim 40 wherein said acknowledgement includes data to be transferred from said base station to said one terminal.

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48. (original patent claim) A method according to claim 40 wherein said one terminal is responsive to transmission from said base station only during said time window.

49. (original patent claim) A method according to claim 48 wherein said time window has a starting point occurring a fixed time from the beginning of said transmitted data packet.

50. (original patent claim) A data communication system comprising:

(a) a host computer including a data communication input/output port;

(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;

(c) a plurality of remote units, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window, each of the remote units having:

(i) a memory for storing data from a local data source, and a processor for

transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window.

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51. (original patent claim) A system according to claim 50 wherein at least some of said remote units are hand-held bar code readers and said local data source of each such remote unit produces decoded bar code data for loading to said memory under control of said processor.

52. (original patent claim) A system according to claim 50 wherein said RF signals are spread spectrum modulated signals of the direct sequence type.

53. (original patent claim) A system according to claim 50 wherein said communication link is a serial data link by which data packets are sent from base station to host computer or base station to base station, or sent from host computer to base station.

54. (original patent claim) A system according to claim 50 wherein said base stations receive said encoded RF signal packets only from a predetermined subset of said plurality of said remote units.

55. (original patent claim) A system according to claim 54 wherein said encoded RF signals include a header containing synchronizing signals followed by a block of data signals.

56. (original patent claim) A system according to claim 50 wherein each one of said remote units is identified by a unique identifying code contained in said encoded RF signals transmitted by the remote unit, and wherein said base stations are responsive to said unique identifying code to allow only one of the base stations to send said RF acknowledge signals to each separate remote unit.

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57. (original patent claim) A system according to claim 56 wherein each one of said base stations is responsive to all of the encoded RF signals from all of the remote units within range, and detects the number of errors occurring in reception from each one of the remote units in said encoded RF signals.

58. (original patent claim) A system according to claim 57 wherein a representation of said number of errors is transmitted to other of said base stations via said communication link to specify the unique codes of remote units each base station is to be responsive to by sending said RF acknowledge signals, said information being derived from said representation of number of errors.

59. (original patent claim) A system according to claim 58 wherein at least some of said remote units are hand-held bar code readers.

60. (original patent claim) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge

packets from one of said base stations, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

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(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet.

61. (original patent claim) A system according to claim 60 wherein said remote units are hand-held bar code readers or the like and said data source of each remote unit produces decoded bar code data.

62. (original patent claim) A system according to claim 60 wherein said RF signals are spread spectrum modulated signals of the direct sequence type.

63. (original patent claim) A system according to claim 60 wherein each said base station receives said encoded RF signal packets from a plurality of said remote units, and each RF signal packet includes a unique identifying code for a remote unit.

64. (original patent claim) A system according to claim 60 wherein said encoded RF signals include a header containing synchronizing signals followed by a block of data signals.

65. (original patent claim) A system according to claim 64 wherein each one of said remote units is identified by a unique identifying code contained in said header of

said encoded RF signal packets transmitted by the remote unit, and wherein each said base station is responsive to said unique identifying code for only predetermined ones of said plurality of remote units.

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66. (original patent claim) A system according to claim 60 wherein said RF transmitter/receiver in said remote unit is activated by said processor for detecting said RF acknowledge packet only during a fixed time window following transmission of said encoded RF signal packet.

67. (original patent claim) A system according to claim 66 wherein said RF transmitter/receiver in a remote unit sends said RF signal packet only after receiving to detect any other RF signal from another remote unit which may be present.

68. (original patent claim) A system according to claim 67 wherein said base station decodes said RF signal packet while said RF signal packet is being received, and said remote unit decodes said RF acknowledge signal after said RF acknowledge signal has been received by accessing said memory via said processor.

69. (original patent claim) A system according to claim 68 wherein said base station decodes said RF signal packet by loading detected data corresponding to the signal serially into a register and decoding bits of said register in parallel.

70. (original patent claim) A method of receiving a direct sequence spread spectrum RF signal having a given chip rate, comprising the steps of:

(a) detecting the RF signal to produce an output correlated with modulation of the RF signal;

(b) sampling said output at a multiple of said chip rate to produce a plurality

of separate time-shifted data strings each at said chip rate;

(c) comparing each of said data strings with a binary code corresponding to that used for generating a chipping sequence of said RF signal.

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71. (original patent claim) A method according to claim 70 including the step of storing said data strings in memory and wherein said step of comparing is by accessing said memory by a processor after said RF signal has been received.

72. (original patent claim) A method according to claim 70 including the step of loading all of said data strings into a shift register and wherein said step of comparing is by decoding bits of said shift register while said RF signal is being received.

73. (original patent claim) A method according to claim 71 wherein said steps are performed by a remote, hand-held, battery-operated unit.

74. (original patent claim) A method according to claim 73 wherein said RF signal is a packet of known maximum length, and said packet starts with a synchronizing signal.

75. (original patent claim) A method according to claim 74 wherein said steps of detecting, sampling and comparing are performed only in a time window established by an RF transmission from said unit.

76. (original patent claim) A method of operating a packet communications system, comprising the steps of:

(a) sending a data packet from a remote terminal to a base station and waiting to receive an acknowledgement from the base station;

(b) if an acknowledgement is not received, then sending a distress packet from said remote terminal;

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(c) receiving said distress packet at a plurality of base stations, and, at each one of said base stations, sending a message to other of said base stations indicating the identity of said remote terminal and the quality of reception of said distress packet;

(d) at a base station, comparing said messages to select one of said base stations to be designated for communication with said remote terminal.

77. (original patent claim) A method according to claim 76 including the step of sending a packet to said remote terminal from said designated base station to acknowledge said distress signal.

78. (original patent claim) A method according to claim 77 wherein said packet is sent to said remote terminal after a predetermined time period has elapsed since said step of sending said distress signal.

79. (original patent claim) A method according to claim 77 wherein said remote terminal is responsive to said packet from said designated base station only during a fixed time window.

80. (original patent claim) A method according to claim 77 wherein said data packet, said distress packet and said acknowledge packet all contain an identifying code for said remote terminal.

81. (original patent claim) A method according to claim 76 wherein said steps of sending are by RF transmission.

82. (original patent claim) A method according to claim 81 wherein said RF

transmission employs spread spectrum modulation.

83. (original patent claim) A method according to claim 76 wherein only one of said base stations sends acknowledgement packets to said remote terminal.

84. (original patent claim) A method according to claim 83 wherein there are a plurality of said remote terminals.

Remarks

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Claims 1-84 are currently pending in the reexamination proceeding of U.S. Patent No. 5,029,183 ("the '183 patent") with claims 1, 21, 40, 50, 60, 70, and 76 being independent claims. Based on the following remarks, the Patent Owner respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. Base Station

A. The Specification and Prosecution History of the '183 Patent Clearly, Deliberately, and Precisely Establishes a Special Definition for the Term "Base Station"

As described in Patent Owner's Reply filed on April 14, 2006 ("Patent Owner's Reply"), the specification and prosecution history of the '183 patent clearly, precisely, and deliberately give the term "base station" the special definition of a unit which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption during a power save mode of operation. In the Office Action, the Examiner argues that this definition improperly reads a limitation from the written description into the claims. (Office Action, pp. 21-22)("Here, rather than pointing to a special definition in the specification, the Patent Owner instead points to embodiment(s) describing a base station that refrains from initiating data communications with a remote terminal")(emphasis in original). However, this is not a case of limiting the claims to a "preferred embodiment" of an invention that has been more broadly disclosed. The specification makes clear that a base station cannot initiate data communications with a remote terminal during a power saving mode of operation.

"Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.,* 242 F.3d 1337, 1341 (Fed. Cir. 2001).

In the current Office Action, the Examiner states that the phrase "so the remote terminal unit can minimize power consumption" in the Patent Owner's definition is merely an exemplary advantage of the claimed system. In support of this position, the Examiner states that "none of the embodiments cited by the Patent Owner in the Reply mention the advantage of minimizing power consumption, which is part of the 'special definition' proposed by the Patent Owner." (Office Action, p. 21). However, this phrase is not merely a recitation of an advantage of the base station; it defines a power saving mode in which the remote station and base station can operate. The specification and prosecution history deliberately define a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal unit (*i.e.*, all data communications between the power saving remote terminal unit and base station take place at a time *selected* by the remote terminal unit).

As explained in the Background of the Invention, a major problem in WLAN protocols prior to 1989 (when the application for the '183 patent was filed) was that they be "addressable at any time, i.e., always activated, so the requirements for power are dictated by this feature," require "continuous monitoring of the RF bands by all of the transceivers," and rely "upon continuous operation of the portable units." ('183 Patent, col. 1, lines 48-50; col. 2, lines 2-4; and col. 2, lines 17-20). Through these discussions,

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the '183 patent distinguishes over the prior art systems having only a mode of operation in which a base station can initiate communications and as a consequence remote terminals in those conventional systems must have their receive functions activated at all times. *See SciMed Sys., Inc.*, 242 F.3d at 1341 ("the SciMed patents distinguish the prior art on the basis of the use of dual lumens and point out the advantages of the coaxial lumens used in the catheters that are the subjects of the SciMed patents. That discussion ... supports the .. conclusion that the claims should not be read so broadly as to encompass the distinguished prior art structure."); *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998)(specification distinguished prior art as inferior and touted advantages of a conical shaped cup for use in an artificial hip device; "such statements make clear that the '589 patent discloses only conical shaped cups and nothing further."); *Ekchian v. Home Depot, Inc.*, 104 F.3d 1299, 1304 (Fed. Cir. 1997) ("Since, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover, he is by implication surrendering such protection.").

The Summary of the Invention stresses the power saving mode of the claimed invention stating that "[a] packet-exchange protocol is used for this communication link that provides *reduced power dissipation at the remote unit by activating the receive function for only a short time*, rather than requiring the remote unit to receive or "listen" at all times." ('183 Patent, col. 2, lines 61-64). This is accomplished by the remote unit initiating data communications at a time *selected* by the remote unit and receiving a response from the base station within a given time period.

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The prosecution history further establishes the Patent Owner's definition of the term base station. Specifically, the applicant made arguments to the Examiner during prosecution which unambiguously set forth the meaning of the language of the claims.

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In the Office Action, the Examiner appears to argue that the prosecution history of the '183 has no role in the interpretation of claims during a proceeding at the Patent However, the Examiner has provided no legal precedents to support his Office.¹ position. On the contrary, the Federal Circuit has designated the prosecution history as part of the "intrinsic evidence" used to interpret claims. Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005). As discussed in Phillips, the prosecution history informs the meaning of the claim language by demonstrating how the inventor and the PTO understood the invention, and whether the inventor limited the invention in the course of applying for the patent, thereby narrowing the claim scope. Id. Despite the suggestion by the Examiner, any statements made by the Patent Owner during prosecution can serve to narrow the scope of a claim, regardless of whether the statements are "unilateral." See Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Ltd., 222 F.3d 951, 957(Fed. Cir. 2000) ("The prosecution history constitutes a public record of the patentee's representations concerning the scope and meaning of the claims ... In the present case, the inventor's statements ... are part of the prosecution history and form the totality of the public record upon which competitors rely").

¹ The Examiner also appears to equate the use of prosecution history to interpret a claim term with the doctrine of prosecution history estoppel which limits the expansion of protection under the doctrine of equivalents. *See Spectrum Int'l, Inc. v. Sterilite Corp.*, 164 F.3d 1372, 1378 n.2 (Fed. Cir. 1998). However these two concepts are distinct. Because this is a reexamination proceeding, prosecution history estoppel is not at issue.

Patent Owner's Reply recited numerous examples of statements made by the Patent Owner in two separate papers to distinguish the current claims over various references by explaining that the references did not teach a system having a power saving mode of operation in which a base station cannot initiate data communications. (Patent Owner's Reply, pp. 22-23). Specifically, the Patent Owner stated:

> The remote units need not be receiving and decoding data at all times (as is true in the Waggener reference) but instead can be idle (for power saving purposes) except when they send, then receive in a fixed window (Amendment dated October 16, 1990 at p. 6)

> The Sidhu et al patent 4,689,786 shows a local area network of the Ethernet type using collision sense, multiple access techniques ... In contrast, the applicant's system is concerned with battery life, so the remote stations can receive only after they have initiated an exchange; *a base station cannot initiate a message exchange with a remote station*. (Supplemental Information Disclosure Statement filed March 26, 1991, p. 2)(emphasis added)

> The Toyonaga et al patent 4,689,785 discloses a data transmission system in which a number of stations A, B, C are connected by a bus line BL ... The system differs from applicant's in that any station can receive at any time, rather than remote stations only receiving after transmitting, and a base station that cannot initiate transmission to a remote. (Id.)(emphasis added)

In each of the prior art references distinguished by the applicant, the remote unit was able to initiate data communications with the base station (as in Koohgoli, et al). However, applicant argued that none taught (just like Koohgoli, et al) a mode of operation wherein the base station could not initiate data communications with the remote unit. To construe the claims as only requiring the remote unit to be able to

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initiate data communications with the base station, would simply ignore the file history and the unequivocal statements of claim meaning made by the applicant.

B. The Claim Construction Order Made By. The District Court In The Proxim Litigation Is Relevant

The Examiner appears to disregard the claim construction ruling by the Honorable Chief Judge Sue L. Robinson made during the Symbol Technologies, Inc. v. Proxim, Inc. litigation ("the Proxim litigation") in the District Court for the District of Delaware.

In the discussion of the claim construction ruling by the Honorable Chief Judge Robinson, the Examiner states that the claim construction ruling "does <u>not</u> appear to be in agreement with the special definitions advanced by the Patent Owner in the Reply and in the Interview Summary." (Office Action, p. 25)(emphasis in original). Specifically, the Examiner states that "[n]othing is stated about the remote unit minimizing power consumption. The court's statement that the 'question you must answer in connection with the asserted claims is whether the accused products, in their power save mode, meet each limitation of such claims" (p. 24 of the Reply) refers to a special mode that an <u>accused device</u> operates under, during which time it operates in a manner that allegedly infringes the claims of the Tymes patent. It does not follow that the claims of the Tymes patent must therefore be interpreted to require the power saving mode of the accused device" (Office Action, pp. 25-26). Patent Owner respectfully submits that the Examiner has misunderstood this quote.

During the trial, the Court was asked to clarify the construction for base station. The Court agreed and included the modified version of the claim construction in the jury instructions quoted above. Thus, the Court's statement represents a clarification to the claim constructions set forth by the court in its Claim Construction order to incorporate the concept of a power saving mode of operation.

Accordingly, the claim construction ruling by the Honorable Chief Judge Robinson in the Proxim litigation, as modified by the court's jury instructions of July 30, 2003, is in complete agreement with the special definition of the term "base station" set out by the Patent Owner in the specification and prosecution history.

II. Claim Rejections

A. Rejection Under §102(e) Over Koohgoli, et al

In the Office Action, claims 1, 2, 5-7, 9, 10, 14-18, 21, 22, 25-28, 35-37, 40-42, 47-50, 53, 54, 56, 57, 60, 63, and 66-69 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 4,771,448 ("Koohgoli"). The Patent Owner respectfully traverses this rejection.

For a prior art reference to anticipate the claimed invention, it must disclose each and every element as set forth in the claim. *See Finnigan Corp. v. United States Int'l Trade Comm'n*, 180 F.3d 1354, 1365-66 (Fed. Cir. 1999). The requirements of strict identity between the claim and the prior art reference, is not met if a single element or limitation required by the claim is missing from the prior art source. *See Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707,716 (Fed. Cir. 1984).

Koohgoli does not teach or even suggest a system or a method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal as is required by the recitation of base station in independent claims 1, 40, 50 and 60 and the recitation of second station in independent claim 21. In the Office Action, the Examiner states that "[a]lthough the unclaimed limitation 'base station unit cannot initiate data communications with a remote terminal so the remote terminal unit can minimize power consumption' should not be read into the claim term 'base station' ... U.S. Patent No. 4,771,448 (the 'Koohgoli' patent) nonetheless teaches a [this] feature. Specifically, Koohgoli teaches that the remote terminals (portables 16) must register with the base station before the base station communicates with them (col. 10, ll. 16-68). That is, the base station receives registration signals transmitted by the remote terminals in order to develop a constantly updated list of remote terminals that are currently within radio reach of the base station (i.e., 'resident portables'). <u>Id.</u>" (Office Action, pp. 26-27).

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Koohgoli however describes that once a portable 16 has registered with a base station 13, that base station 13 can initiate communication with the portable. For example, in the case of call reception, a base station 13 initiates communication with a portable by transmitting a radio ringing message. (Koohgoli, col. 10, lines 45-68). Base stations in Koohgoli are specifically designed to initiate communication with registered portables.

Thus, Koohgoli does not teach or even suggest a system or a method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal as is required by the recitation of base station in independent claims 1, 40, 50 and 60 and the recitation of second station in independent claims 21.

For at least these reasons, independent Original Patent Claims 1, 21, 40, 50, and 60 are patentable over Koohgoli. Claims 2, 5-7, 9, 10, and 14-18 depend from claim 1;

claims 22, 25-28, and 35-37 depend from claim 21; claims 41, 42, and 47-49 depend from claim 40; claims 53, 54, 56, and 57 depend from claim 50; and claims 63 and 66-69 depend from claim 60. For at least these reasons and further in view of their own features, dependent claims 2, 5-7, 9, 10, 14-18, 22, 25-28, 35-37, 41, 42, 47-49, 53, 54, 56, 57, 63 and 66-69 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

B. Rejection Under §103 Over Koohgoli

In the Office Action, claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 29, 30-34, 38, 39, 43, 51, 52, 61, and 62 were rejected under 35 U.S.C. §103(a) as being unpatentable over Koohgoli. The Patent Owner respectfully traverses this rejection.

Claims 3, 4, 8, 11, 12, 13, 19, and 20 depend from claim 1; claims 23, 24, 29, 30-34, 38, and 39 depend from claim 21; claim 43 depends from claim 40; claims 51 and 52 depend from claim 50 and claims 61 and 62 depend from claim 60. As discussed above, Koohgoli does not teach or suggest each and every element of independent Original patent claims 1, 21, 40, 50, and 60. For at least these reasons, and further in view of their own features, dependent claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 29, 30-34, 38, 39, 43, 51, 52, 61, and 62 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

C. Rejection Under §103 Over Koohgoli in view of Carlman, Jr., et al and further in view of Malcolm

In the Office Action, claims 55, 64, and 65 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Carlman, Jr., *et al*, U.S. Patent No. 4,777,488 (Carlman) and further in view of Malcolm, et al, U.S. Patent No. 4,332,027 (Malcolm). The Patent Owner respectfully traverses this rejection. Claim 55 depends from claim 50 and claims 64 and 65 depend from claim 60. Independent claims 50 and 60 are distinguished from Koohgoli for the reasons set forth above. Neither Carlman nor Malcolm adds anything to Koohgoli to overcome the deficiencies of Koohgoli relative to independent claims 50 and 60 described above. Like Koohgoli, Carlman and Malcolm, alone or in combination, not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal. For at least these reasons and further in view of their own features, dependent claims 55, 64, and 65 are patentable over the combination of Koohgoli, Carlman, and Malcolm.

D. Rejection Under §103 Over Koohgoli and Shiff

In the Office Action, claim 44 was rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Shiff, U.S. Patent No. 4,587,661 (Shiff). The Patent Owner respectfully traverses this rejection.

Claim 44 depends from claim 40. Independent claim 40 is distinguished from Koohgoli for the reasons set forth above. Shiff adds nothing to Koohgoli to overcome the deficiencies of Koohgoli described above. Like Koohgoli, Shiff does not teach or even suggest a system or method having a power saving mode of operation in which a base station cannot initiate data communications with a remote terminal.

For at least these reasons and further in view of its own features, dependent claim 44 is patentable over the combination of Koohgoli and Shiff.

III. Patentable Subject Matter

The Patent Owner acknowledges with appreciation the Examiner's indication that claims 45, 46, 58, 59, and 69-84 are patentable.

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IV. Related Proceedings

Claims 1, 16, 21, 35, and 40-41 of the '183 patent were the subject of prior litigation in the United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Proxim, Incorporated*, Civil Action No. 1:01-cv-00801-SLR. The Proxim litigation was settled following a jury verdict finding infringement by Proxim.

- 27 -

The '183 patent was previously asserted in United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Intermec Technologies Corporation*, Civil Action No. 1:05-cv-00147-SLR. The Intermec litigation was settled prior to trial.

The '183 patent was also previously asserted in two additional litigations in United States District Court for the District of Delaware: *Symbol Technologies, Inc. v. Hand Held Products,* Civil Action No. 1:03-cv-00102, filed January 21, 2003 and *Symbol Technologies, Inc. v. YDI Wireless Inc., et al*, Civil Action No. 1:05-cv-00755, filed October 28, 2005. Both litigations ended in settlement.

V. Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. The Patent Owner therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. The Patent Owner believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present reexamination proceeding is in condition for a Notice of Intent to Issue a Reexamination Certificate. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

LaRoy TYMES Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: 57

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

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Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

<u>CERTIFICATION OF SERVICE OF REPLY TO OFFICE ACTION</u></u>

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on April 9, 2007. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95110

> > Respectfully submitted,

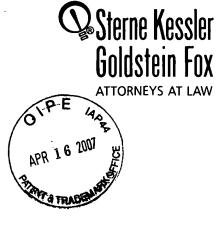
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

V d

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: April 9, 2007

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600



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Robert Greene Sterne Jorge A. Goldstein David K.S. Comwell Robert W. Esmond Tracy-Gene G. Durkin Michele A. Cimbala Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Homer Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Patrick E. Garrett Jeffrey T. Helvey Heidi L. Kraus Eldora L. Ellison Thomas C. Fiala Donald R. Banowit Peter A. Jackman Jeffrey S. Weaver Brian J. Del Buono Edward W. Yee Vincent L. Capuano Vingil Lee Beaston Theodore A. Wood Eizabeth J. Hoanes Joseph S. Ostroff Frank R. Cottingham Rae Lynn P. Guest Daniel A. Klein

April 16, 2007

Jason D. Eisenberg Michael D. Specht Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cynthia M. Bouchez Timotry A. Doyle Gaby L. Longsworth Lori A. Gordon Laura A. Vogel Bryan S. Wade Bashir M.S. Ali Shannon A. Carroll Matthew E. Kelley Michelle K. Holoubel Marsha A. Rose Young Tang Christopher J. Walsh W. Blake Coblentz* James J. Pohl* John T. Haran* Mark W. Rygiel Kevin W. McCabe

Registered Patent Agents Karen R. Markowicz Matthew J. Dowd Katina Yujian Pei Quach Bryan L. Skelton Robert A. Schwartzman Victoria S. Rutherford Simon J. Elliott Julie A. Heider Mita Mukherjee Scott M. Woodhouse Liliana Di Nola-Baron Peter A. Socarras Jeffrey K. Mills Danielle L. Letting Lori Brandes Steven C. Oppenheimer

Of Counsel Edward J. Kessler Kenneth C. Bass III Marvin C. Guthrie

*Admitted only in Maryland * Admitted only in Virginia •Practice Limited to Federal Agencies

WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Art Unit 3992

Attn: Mail Stop Ex Parte Reexam

Re: Reexamination of U.S. Patent No. 5,029,183 Reexam Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: LaRoy TYMES Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Third Supplemental Information Disclosure Statement;
- 2. Certification of Service on Third Party Requestor of Third Supplemental Information Disclosure Statement;
- 3. One (1) sheet of Form PTO/SB/08A listing one (1) document; and
- 4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

RES/LAG/mlb Enclosures 665113_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183

LaRoy TYMES

Reexam Control No.: 90/007,617

Filed: July 6, 2005

For: Packet Data Communication Network Confirmation No.: 7501 Art Unit: 3992 Examiner: Foster, Roland G. Atty. Docket: 2319.065REX0

Third Supplemental Information Disclosure Statement

Mail Stop Ex Parte Reexam

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO/SB/08A is a document that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.555 and 1.98.

Applicant has listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent Page 207 of 341

LaRoy TYMES Reexam of Pat. No. 5,029,183 Reexam Control No.: 90/007,617

application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

- 2 -

In accordance with 37 C.F.R. § 1.98(a)(2), no copy of the U.S. patent cited on the attached IDS Forms is submitted.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this reexamination proceeding that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl

Attorney for Applicant Registration No. 36,013

Date:

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

662365_2.DOC

Equivalent of Form PTO/SB/08A (09-06) Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO			2	Complete	Complete if Known	
TUD				Reexam Control No.	90/007,617	
THIRD SUPPLEMENTAL				Filed	July 6, 2005	
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Applicant	LaRoy TYMES	
STAT				Art Unit	3992	
				Examiner Name	Foster, Roland G.	
Sheet	1	of	1	Attorney Docket Number	2319.065REX0	
				U.S. PATENT DOCUMENTS		

Examiner Cite Initials No. ¹		Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines,
	Number-Kind Code ^{2 (If Known)}	ΜΜ/ΥΥΥΥ	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	
	USI	4,291,410	09/1981	Caples et al.	
	US2				
	US3				
	US4				
	US5				
	US6				
	US7				
	US8				
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	US20				

		Fo	REIGN PATENT DO	DCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM/YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	
:		Country Code ³ Number ⁴ Kind Code ³ (if known)			Relevant Passages or Relevant Figures Appear	T.
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	FP7					
	FP8					
	FP9					

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Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. • Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Foster, Roland G. Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATION OF SERVICE OF THIRD SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on April 16, 2007. The name and address of the party served is as follows:

Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 1762 Technology Drive Suite 226 San Jose, CA 95121

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date 1100 New York Avenue, N.W. Washington, D.C. 20005-3934

Washington, D.C. 20005-3934 (202) 371-2600 662365_2.DOC

Atty. Dkt. No. 2319.065REX0

Page 210 of 341

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination
	90/007,617	5029183
	Examiner	Art Unit
	Roland G. Foster	3992

UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspro.gov

9/21/07

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS Edward C. Kwok MACPHERSON KWOK CHEN & HEIDI LLP 1762 Technology Drive, Suite 226 San Jose, CA 95110

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO 90/007617 PATENT NO. 5,029,183 ART UNI 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

	red States Paten	T AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 22: www.uspto.gov	Trademark Office OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	2319.065REX0	7501
26111 7	09/21/2007		EXAM	INER
	ESSLER, GOLDSTEI DRK AVENUE, N.W.	N & FOX P.L.L.C.		
	N, DC 20005		ART UNIT	PAPER NUMBER
			DATE MAILED: 09/21/200	7

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

•

	Control No. 90/007,617	Patent Under Reexamination 5029183				
Office Action in Ex Parte Reexamination	Examiner Roland G. Foster	Art Unit 3992				
a⊠ Responsive to the communication(s) filed on <u>09 April 200</u> c□ A statement under 37 CFR 1.530 has not been received		FINAL.				
A shortened statutory period for response to this action is set to expire <u>2</u> month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an <i>ex part</i> e reexamination certificate in accordance with this action. 37 CFR 1.550(d). EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c) . If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.						
Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF	THIS ACTION:					
1. I Notice of References Cited by Examiner, PTO-8	92. 3. 🗌 Interview Summa	iry, PTO-474.				
2. X Information Disclosure Statement, PTO/SB/08.	4. 🔲					
Part II SUMMARY OF ACTION						
1a. X Claims <u>1-84</u> are subject to reexamination.						
1b. Claims are not subject to reexamination.						
2. Claims have been canceled in the presen	t reexamination proceeding.					
3. 🛛 Claims <u>45,46,58,59 and 69-84</u> are patentable ar	nd/or confirmed.					
4. 🛛 Claims <u>1-44,47-57 and 60-68</u> are rejected.						
5. Claims are objected to.						
6. 🔲 The drawings, filed on are acceptable.	· · · · · · · · · · · · · · · · · · ·					
7. The proposed drawing correction, filed on	has been (7a) approved (7b)	disapproved.				
8. Acknowledgment is made of the priority claim ur	der 35 U.S.C. § 119(a)-(d) or (f).					
a) All b) Some* c) None of the certi	fied copies have					
1 been received.		· · · · ·				
2 not been received.	•					
3 been filed in Application No						
4 been filed in reexamination Control No.	'					
5 been received by the International Bureau	in PCT application No					
* See the attached detailed Office action for a list	of the certified copies not received.					
 9. Since the proceeding appears to be in condition for issuance of an <i>ex part</i>e reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte</i> Quayle, 1935 C.D. 11, 453 O.G. 213. 						
10. Other:						
cc: Requester (if third party requester) U.S. Patent and Trademark Office		D .014 00-11				
PTOL-466 (Rev. 08-06) Office Action in	Ex Parte Reexamination	Parger 2apter 01632101070914				

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Application/Control Number: 90/007,617 Art Unit: 3992

Reexamination

Summary

The reply, filed on April 9, 2007, (the "Reply") has been duly considered but is not deemed persuasive to overcome the prior rejections. See the "Response to Arguments" section below for additional details. Thus, the rejections, set forth in the non-final Office action, mailed February 9, 2007, is repeated below and accordingly, this Office action is made final. See MPEP § 706.07 and § 2271.

Claim Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5-7, 9, 10, 14-18, 21, 22, 25-28, 35-37, 40-42, 47-50, 53, 54, 56, 57, 60, 63,

and 66-69 are rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 4,771,448

("Koohgoli"), of record.

Regarding claims 1, 5, 21, 25, 26, 40, and 47:

1. A method of transmitting data packets from one of a plurality of remote terminal units to a base station, comprising the steps of:

Page 215 of 341

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units.

Before applying Koohgoli to claim 1, it is helpful to consider claim 1 in view of Patent Owner's specification. Patent Owner's specification teaches that data packets are transmitted from the remote unit during a first time period t2 (Fig. 2 and col. 5, ll. 40-61), immediately after which the remote unit "begins listening for the return packet...from the base station" during a second time period occurring a fixed time delay (t3) after the first period (Figs. 2, 11A, 11B, and col. 5, ll. 58-61). Consider Figure 1 below.

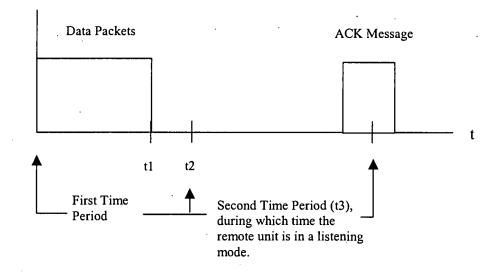


Figure 1. Claim 1 in View of Patent Owner's Specification.

Similarly, and as to be discussed in detail below, Koohgoli teaches that data packet(s) (a REQ message) are transmitted from the remote unit during a first time period, defined as the time TL1 plus the time required to transmit the REQ message, immediately after which the remote unit goes into a listening mode during a second time period occurring a fixed time delay (TL2) after the first time period.

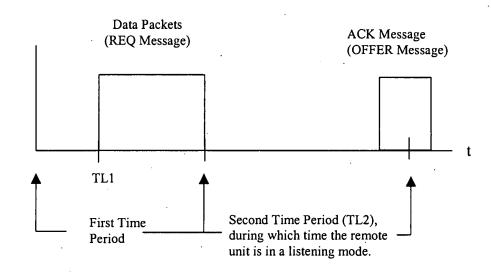


Figure 2. Claim 1 as Applied to Koohgoli

Specifically regarding claim 1, Koohgoli teaches, in Fig. 3, a method of transmitting data packets from one of a plurality of remote terminal units (a portable unit 16, which is also a data terminal, col. 6, ll. 27-31) to a base station (base station 13), comprising the steps of transmitting a data packet from the one unit to the base station during a first time period selected by the unit. In particular, the portable unit 16 transmits a message, such as a request ("REQ") message (data packet) (col. 7, ll. 48-67), from the portable unit 16 to the base station 13 during the a first time

period comprised by the time TL1 plus the time required to transmit the message (col. 11, line 62 – col. 12, line 2). The remote unit (portable unit 16) assigns TL1 to a random value TR (col. 11, ll. 64-68), thus the remote unit selects TL1. Because the first time period is TL1 plus the time required to transmit the REQ data packets, the remote unit therefore also selects the length of the first time period.

Koohgoli also teaches receiving at said remote terminal unit (portable unit 16) from the base station an OFFER message, which is transmitted by the base station in recognition of the previously received REQ message (col. 8, ll. 1-40) and where the remote terminal expects and processes such a response (col. 8, ll. 41-68). Thus, the OFFER message is an acknowledgement signal.

The acknowledgement signal (OFFER message) is received at the remote unit (portable 16) during a second time period occurring only a fixed time delay TL2 after the first time period, during which time the remote unit (portable unit 16) goes into a listening mode waiting for the acknowledgement signal (col. 12, ll. 3-20).

The second time period is preferably 2000 microseconds (col. 12, ll. 21-25), which would be the same for all the remote terminal units (portables 16) (col. 6, ll. 27-31).

Claim 21 differs substantively from claim 1 in that claim 21 recites a system comprising components that implements the steps recited in the method of claim 1. Therefore, see the claim

1 rejection for additional details. Furthermore, data is transferred from the base station to the remote terminal unit via a radio frequency ("RF") communications channel (col. 6, ll. 43-50), thus a "transmitter" is inherent to a base station 13 and a "receiver" is inherent to a portable, remote unit (portable unit 16).

Claim 40 differs substantively from claim 1 in that claim 40 recites that the data packet includes the identification ("ID") of the terminal and that the acknowledgement signal includes the ID of the terminal. Koohgoli further teaches that the data packet (REQ message) includes the ID of the terminal (ID of portable unit 16) (col. 7, 1. 60-62) and that the acknowledgement signal (OFFER message) includes the ID of the terminal (portable unit 16) as well as base station 13 (col.8, lines 20-23).

Claims 50 and 60 differ substantively from the claims discussed above in the following manner. The subject claims recites a "host computer," which reads on switch 11, which is a computer-based switch, such as an SL-100 (Northern Telecom) private branch exchange (col. 5, 11. 47-51).

The claims also recite a variety of "input/output ports", however the term "port" is a broad term that means a hardware interface that connects one computer device to another. Koohgoli teaches that all computer devices are connected to each other (Figs. 1 and 2) and thus the computer devices of Koohgoli comprise input/output ports wherever they connect together.

The subject claims also recite that the base stations also include an "RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets." As discussed above, Koohgoli teaches that the base station detects REQ data packets and transmits acknowledge (OFFER) data packets over a radio frequency ("RF") channel. See also col. 6, ll. 43-50. Thus, the base station includes an RF transmitter and receiver. See also the claim 21 rejection. Furthermore, Koohgoli teaches that the transmitted packet received at the base station and the acknowledge signal sent by the base station are coded into and decoded from the appropriate protocols radio protocols, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, ll. 50-55). Thus, the base station performs coding/decoding to and

from the radio channel.

The subject claims also recite that the remote units include a "memory for storing data from a local data source, and a processor for transferring data to and from the memory." The remote terminal unit (portable unit 16) in Koohgoli is a computer-based system (see, e.g., col. 6, ll. 26-31) and thus includes a processor that implements the functions of the remote terminal unit and a memory to store binary data that the processor fetches instructions and data received and/or transmitted from the local data source (or from the RF channel) would also be, at least temporarily, stored and/or buffered in computer memory before being processed by the processor.

The subject claims also recite that the remote unit includes an "RF transmitter/receiver" for performing various functions (e.g., transmitting encoded data packets, detecting an

acknowledge signal packet from the base station in a fixed time window) previously addressed above. Thus, the remote terminal unit includes the recited means for transmitting encoded packets and a detector. The subject claims also recite that the remote terminal unit includes a "modulator for modulating an outgoing carrier." The remote unit includes an RF transmitter/receiver for the same reasons that the base station also includes an RF transmitter/receiver, which was discussed extensively above. See also the claim 21 rejection. The remote terminal unit (portable unit 16) also modulates a carrier frequency (col. 12, ll. 3-10) and thus would include a modulator.

Regarding claims 2, 22, and 42, Koohgoli discloses the transmitting and receiving steps are by RF signals. See the claims 1, 12, and 50 rejections above. Therefore, the transmitting and receiving steps are performed by RF signals.

Regarding claims 5 and 25, see the claim 40 rejection for additional details.

Regarding claim 6, see the claim 1 rejection for additional details.

Regarding **claims 7 and 27**, Koohgoli discloses the remote stations are hand-held data gathering units, which include manual control elements and where each remote unit 16 is capable of receiving/transmitting voice/<u>data</u> by the manual placement/reception of a calls (col.6, lines 30-42).

Regarding **claim 9**, the base station in Koohgoli is a computer-based system and thus includes a processor that implements the functions of the base station device and a memory to store binary data that the processor fetches instructions and data from. Transmitted and received data packets would also be, at least temporarily, stored and/or buffered in the computer memory.

Regarding **claim 10**, Koohgoli teaches that both the transmitted packet received at the base station and the acknowledge signal sent by the base station are coded into and decoded from the appropriate protocols radio protocols, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, 11. 50-55). Thus, a processor in the base station, which implements the functions of the base station device, as discussed in the claim 9 rejection above, would also perform coding/decoding to and from the radio channel.

Regarding **claim 14**, Koohgoli teaches that a second station transmits the acknowledgement signal. Specifically, a base station (second station) sends an acknowledgment signal (OFFER message, as discussed in the claim 1 rejection above) to portable unit 16. The base station (second station) is one of a plurality of said second stations physically spaced from one another that may send an acknowledgment signal (OFFER message) because the base station 13 is one of plurality of other base stations 13 located in separate cells 12 (Fig. 1 and col.5, l. 50 – col. 6, l. 30). There is a plurality of remote terminal units (portable units 16) for each of the second station because there are many portable units 16 in each cell 12 in which the base station 16 is located (col. 6, ll. 27-31).

Page 9

Regarding **claims 15, 17, and 36**, Koohgoli teaches that the transmitted packet and the acknowledge signal is coded into the appropriate protocol, e.g., "unslotted ALOHA type" with carrier sense" (col. 7, 11. 50-55) and identifies each unit, as discussed in the claim 40 rejection above. Thus the identification would be unique to the particular terminal unit; otherwise the remote terminal unit could not be identified, contrary to the teachings of Koohgoli.

Regarding claims 16, 35, and 41, Koohgoli discloses the unit, prior to the transmitting, receives the data packet in order to detect transmission by other like units (portable unit 16 senses the activity of uplink channel to determine if the uplink channel is free to transmit, see col.7, lines 52-57 and col. 11, l. 40 - col. 12, l. 25).

Regarding **claims 18, 28 and 37**, the remote terminal unit in Koohgoli is a computerbased system and thus includes a processor that implements the functions of the remote terminal unit and a memory to store binary data that the processor fetches instructions and data from. Transmitted and received data packets would also be, at least temporarily, stored and/or buffered in computer memory.

Regarding **claim 26**, Koohgoli teaches a plurality of remote stations (portable units 16) (col. 6, ll. 27-31).

Regarding claim 47, see col. 8, ll. 19-23.

Regarding **claims 48 and 49**, Koohgoli teaches that the remote terminal will not listen and instead attempt to transmit data (i.e., nonresponsive to transmissions from the base station) after the time window TL2 has elapsed (col. 12, ll. 1-20). Also note that the remote terminal is responsive to the transmission from base station only during the request time out period (col.8, lines 45-68). See the claim 1 rejection for additional details.

Regarding **claim 53**, Koohgoli that each base station is coupled for communication to a host computer (switch 11), as discussed in the claim 50 rejection, via a serial land link 14 (col.7, lines 1-35).

Regarding claim 54, see the claim 1 rejection for additional details.

Regarding claims 56 and 63, see the claims 1 and 15 rejections above for additional details.

Regarding claim 57, see col. 8, ll. 1-10.

Regarding claim 66, see the claim 1 rejection for additional details.

Regarding claims 67 and 68, see the claims 1 and 50 rejections for additional details.

Page 224 of 341

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.

Claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51, 52, 61, and 62 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli, as applied to the claims above.

Regarding **claims 8, 19, 29, 38, 51, and 61,** Koohgoli discloses the remote unit including bar-code reading devices (portable unit 16 is capable of scanning all downlink radio channels; see col. 6, lines 30-34). Thus, the portable unit 16 is clearly a data-gathering device, which the Patent Owner considers capable of being equivalent to a bar code reading device. See for example, col. 5, ll. 25-32 of the Tymes patent under reexamination, where, although "bar-code readers are mentioned....[o]ther types of data gathering devices may use the features of the invention..." Nonetheless, Koohgoli fails to explicitly disclose that the remote data terminal may be a bar code reader device.

However, the Patent Owner admits in the background section of the Tymes patent that prior art, remote data terminals, in the form of bar code reader, are connected to radio frequency ("RF") networks (col. 1, ll. 10-42).

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to implement the remote data terminals connected to an RF network, as taught by Koohgoli as a bar code reader, as taught by Patent Owner's admitted prior art.

The suggestion/motivation for doing so would have been to the flexibility and convenience of the bar code reading system, for example, "when the bar code reader is to be used by a person who is moving about a building, or when temporary installations are employed, physical wiring is unsuitable, or is at least quite inconvenient" (Tymes, col. 1, ll. 15-20).

Regarding claims 3, 4, 11, 23, 24, 31, 43, 52, and 62, Koohgoli fails to disclose the RF signals are a spread spectrum direct sequence. Such a teaching however was officially noticed as being well known by the examiner in the last Office action and the Patent Owner in his reply did not traverse such an finding. Thus, the examiner's statement is taken to be admitted prior art.

Therefore, it would have been obvious to use RF signals in spread spectrum direct sequence in cellular system of Koohgoli.

The suggestion/motivation for doing so would have been to increase communication channel efficiency by prevent co-channel interferences. Specifically, and as officially noticed, the use of RF signals in spread spectrum direct sequence is well known in the art because each remote unit is assigned a PN code which prevent interferences between different remote units.

Regarding **claims 12, 13, 32, and 33**, Koohgoli discloses the acknowledge signal is transmitted by a second station which is one of a plurality of like second stations (base station 13, like other base stations 13, transmits an OFFER message to portable unit 16; see col.8, lines 15-20); and each one of the second stations is coupled for communication to a central computer (in cellular system as shown in Fig.1, each base station 13 is coupled to a switch 11 via a serial land link 14; see also col.7, lines 1-35). See the claim 14 rejection for additional details.

Regarding **claims 20 and 30**, Koohgoli discloses the remote unit including keyboard inputs and visual display (portable unit 16 are telephone units or data modem; see col.2, lines 65; which are used in cellular network. Therefore, they have keyboard inputs and visual display).

Regarding claim 34, see the claims 50 and 60 rejections for additional details.

Regarding **claim 39**, Koohgoli discloses the remote unit including keyboard inputs and visual display (portable unit 16 are telephone units or data modem; see col.2, lines 65; which are used in cellular network. Therefore, they have keyboard inputs and visual display).

Claims 55, 64, and 65 are rejected under 35 USC 103(a) as being unpatentable over Koohgoli in view of Carlman, as applied to the claims above, and further in view of U.S. Patent No. 4,332,027 ("Malcolm"), of record.

Regarding **claims 55 and 64**, Koohgoli and Carlman fail to disclose the encoded RF signal including a header containing a synchronizing signals followed by a block of data signals.

Malcolm however discloses, in Fig.2, a fixed size packet containing syn code followed by a destination address (a header). The destination address is followed by a data field. See col.3, lines 5-15.

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to have synchronizing signal in the RF signal of Koohgoli so that the request and ACK signals are transmitted and received at a desired time thereby increasing the efficiency, predictability, and accuracy of data transmission. For example, use of the synchronizing signal would have "minimized conflicts between the respective nodes without requiring transmitting stations to be capable of detecting collisions" (Malcom, col. 1, ll. 60-68) without requiring a costly, complex master controller (Malcom, col. 1, ll. 13-40).

Regarding claim 65, see the claims 1 and 15 rejection above for additional details.

Claim 44 is rejected under 35 USC 103(a) as being unpatentable over Koohgoli as applied to the claims above, and further in view of U.S. Patent No. 4,587,661 ("Shiff"), of record.

Koohgoli fails to disclose spread spectrum technique employs a sequence of frequency shifts between two frequencies. Shiff discloses a spread spectrum transmission between an earth station and satellite such as indicated in fig.4, a change in frequency occurs in response to a change of clock pulse rate; see col.7, lines 8-20 (a sequence of frequency shifts between two frequencies). Therefore, it would have been obvious use the frequency shift of Shiff into the Koohgoli et al. in order to provide synchronization at portable unit 16. Furthermore, such synchronization would have increased efficiency by maintaining the a low error rate because orthogonality of the sequences (Shiff, col. 2, 11. 44-68).

Statement Of Reasons For Patentability And/Or Confirmation

See pages 16-19 of the non-final Office action, mailed February 9, 2007, for further details regarding the examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding.

Response To Arguments

On pages 17 and 18 of the Response, the Patent Owner argues that the claim term "base station" must be given the special definition of a unit which cannot initiate data communications with a remote terminal unit so the remote terminal unit can minimize power consumption during a power save mode of operation. The Patent Owner argues that "this phrase is not merely a recitation of an advantage of the base station; it defines a power saving mode in which the remote station and base station can operate." The Patent Owner then refers to various sections of the Background of the Invention and the Summary of the Invention as support as support.

The Patent Owner arguments have been duly considered, but are not persuasive. Those sections of the Background and Summary that the Patent Owner cites refer to advantages of the base station, such as "reduced power dissipation at the remote unit by activating the receive function for only a short time..." (col. 2, ll. 61-64). The Tymes patent teaches that various embodiments have other advantages, such as "low-cost" units of "lesser computational capacity" (col. 3, ll. 10-14 and col. 13, ll. 17-19, 25-30, and 42-51). Thus, minimization of power consumption is merely one of several, exemplary advantages that one of ordinary skilled in the art would consider when interpreting the claims in view of the specification. Thus, one of ordinary skill in the art would not have given notice of the meaning of the claim term "base station" was restricted to just one of these several advantages disclosed in the specification. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (holding that specific terms may be used to describe invention, but must done "with reasonable clarity, deliberateness, and precision" and, if done, must "set out his uncommon definition in some manner within the patent disclosure' so as to give one of ordinary skill in the art notice of the change" in meaning) (quoting Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992)). See also Merck & Co., Inc., v. Teva Pharms. USA, Inc., 395 F.3d 1364, 1370, 73 USPQ2d 1641, 1646 (Fed. Cir. 2005) ("When a patentee acts as his own lexicographer in redefining the meaning of particular claim terms away from their ordinary meaning, he must <u>clearly express that intent</u> in the written description.") (emphasis added). See also MPEP 2111.01.IV.

The Patent Owner's arguments regarding prosecution history estoppel on pages 20-22 are unpersuasive for the reasons set forth in the prior Office action, such as the fact that the prosecution history is incomplete. The prosecution history "consists of the <u>complete</u> record of the proceeding before the PTO...." <u>Phillips v. AWH Corp.</u>, 415 F.3d 1303, 1317 (Fed. Cir. 2005) *en banc* (emphasis added). In the current reexamination proceeding, the record is still pending. At the present moment, the claims have not yet been confirmed and no arguments have yet been made that secures their patentability. Furthermore, no presumption of validity attaches during a reexamination proceeding, thus prosecution history estoppel from the original allowance would

not apply.

The Patent Owner's arguments regarding the specific claim rejections are based on the specification definition of "base station" favored by the Patent Owner, as discussed above. The examiner however does not find the Patent Owner's reasons for interpreting the term "base station" according to this special definition persuasive, as discussed above. Thus, Patent Owner's arguments regarding the claim rejections are also unpersuasive.

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07 and § 2271.

A shortened statutory period for response to this action is set to expire 2 months from the mailing date of this action.

Extensions of Time

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination

proceedings. The provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings "will be conducted with special dispatch within the Office."

Extensions of time in reexamination proceedings are provided for in 37 CFR

1.550(c). A request for extension of time must be filed on or before the day on which a response to this action is due, and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). The mere filing of a request will not effect any extension of time. An extension of time will be granted only for sufficient cause, and for a reasonable time specified.

The filing of a timely first response to this final rejection will be construed as including a request to extend the shortened statutory period for an additional month, which will be granted even if previous extensions have been granted. In no event, however, will the statutory period for response expire later than SIX MONTHS from the mailing date of the final action. See MPEP § 2265.

Amendment in Reexamination Proceedings

Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c). See MPEP § 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

Submissions

Submissions after the final Office action on the merits will be governed by the requirements of 37 CFR 1.116, after final rejection and by 37 CFR 41.33 after appeal, which will be strictly enforced. Any amendment after a Final Action must include "a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented" in order to be considered. See MPEP § 2260.

Notification of Concurrent Proceedings

The Patent Owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving U.S. Patent No. 5,029,183 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly appraise the Office of such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282, and 2286.

Page 234 of 341

All correspondence relating to this ex parte reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop "Ex Parte Reexam" ATTN: Central Reexamination Unit Commissioner for Patents P. O. Box 1450 Alexandria VA 22313-1450

By **FAX** to:

(571) 273-9900 Central Reexamination Unit

By hand to:

Customer Service Window Central Reexamination Unit Randolph Building, Lobby Level 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be

directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

Roland G. Foster Central Reexamination Unit, Primary Examiner Electrical Art Unit 3992 (571) 272-7538

Conferee WEAVER CRU EXAMINER-AU 3992

MARK J. REINHART SPRE-AU 3992 CENTRAL REEXAMINATION UNIT

Equivalent of Form PTO/SB/08A (09-06)

Approved for use through 0331/2007. OMB 0651-0001 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paparwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO)	Complete if Known		
-			Reexam Control No.	90/007,617		
THIRD SUPPLEMENTAL INFORMATION DISCLOSURE		Filed	July 6, 2005			
		Applicant	LaRoy TYMES			
STAT	EME	NT BY	APPLICANT	Art Unit	3992	
	(Use as	many shee	ets as necessary)	Examiner Name	Foster, Roland G.	
Sheet		of	1	Attorney Docket Number	2319.065REX0	

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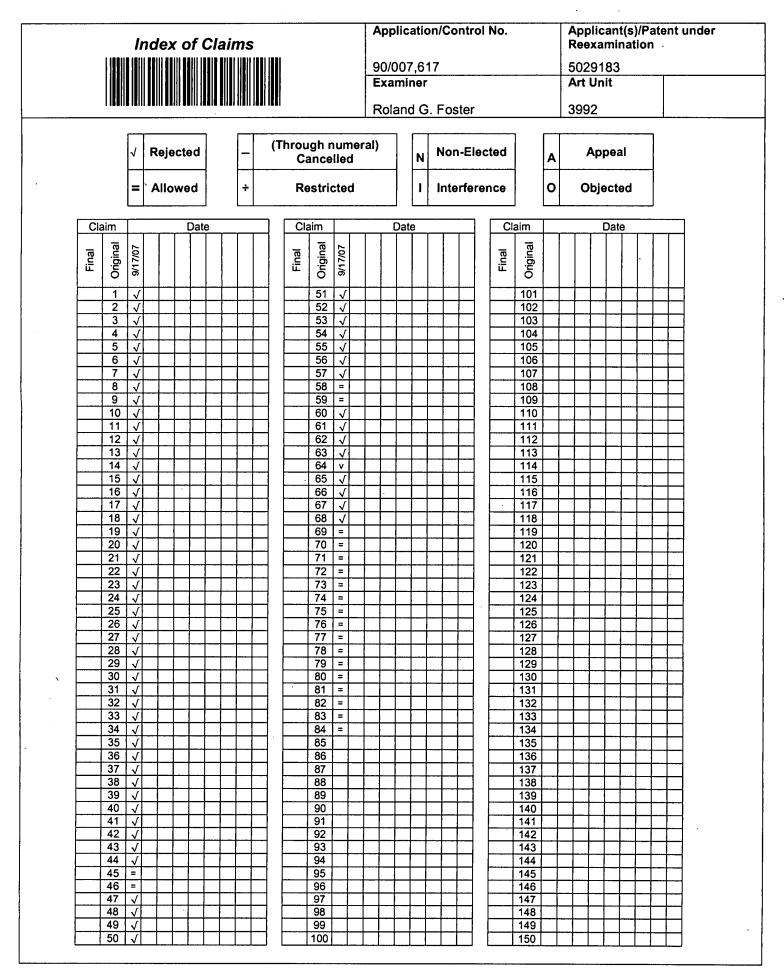
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Signature	/Roland Foster/	Considered	09/17/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional).³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the emount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patent and Trademark Office, P.O. Box 1450, Alexandría, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

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U.S. Patent and Trademark Office

Part of Paper No. 20070914

Reexamination	Application/Control No. 90/007,617	Applicant(s)/Patent Under Reexamination 5029183
	Certificate Date	Certificate Number

Requester	Correspondence Address:	Patent Owner	🛛 Third Party	
	Kwok Chen & Heidi LLP logy Drive, Suite 226			·
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Edward C. Kwok(3) Edward C. Kwok, S	ies Inc.(Owner), Houston, T rd. Pty. Req.), San Jose, C San Jose, CA							
** CONTINUING DATA *** This application is a ** FOREIGN APPLICATIO	a REX of 07/374,452 06/29	/1989 PA	T 5,029,183					
Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and Acknowledged Exa	yes no yes no Met after A miner's Signature		STATE OR COUNTRY		EETS WING	CL	TAL AIMS 34	INDEPENDENT CLAIMS 7
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Application Number:	90007617					
International Application Number:						
Confirmation Number:	7501					
Title of Invention:	PACKET DATA COMMUNICATION NETWORK					
First Named Inventor/Applicant Name:	5029183					
Customer Number:	26111					
Filer:	Lori Ann Gordon/Kim Perry					
Filer Authorized By:	Lori Ann Gordon					
Attorney Docket Number:	2319.065REX0					
Receipt Date:	05-NOV-2007					
Filing Date:	06-JUL-2005					
Time Stamp:	20:16:23					
Application Type:	ex parte reexam					

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1		2319065REX0.pdf	74379	ves	3
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EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 98/007,742

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PATENT NO. 5470441. 5629183

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

PTOL-465 (Rev.07-04)

	Control No.	Patent Under Re	examination
Ex Parte Reexamination Interview Summary	90/007,702 90/000,617		
	Examiner	Art Unit	<u> < 1103</u>
	Roland G. Foster	3992	
All participants (USPTO personnel, patent owner, patent ov	wner's representative):		
(1) <u>Roland G. Foster</u>	(3) <u>Lori Gordon (Reg. No</u>	. 50,633)	
(2) <u>Robert E. Sokohl (Reg. No. 36,013)</u>	(4)		
Date of Interview: <u>13 November 2007</u> R ム 下 Type: a) Telephonic b) Video Conference c) Personal (copy given to: 1) patent owner	2) Zpatent owner's repre	esentative)	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Agreement with respect to the claims f) was reached. Any other agreement(s) are set forth below under "Descript	g)☐ was not reached. h)⊠ tion of the general nature of w	N/A. hat was agreed to	o"
Claim(s) discussed: <u>Independent claims</u> .			
Identification of prior art discussed: Koohgoli.			
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(A fuller description, if necessary, and a copy of the amend patentable, if available, must be attached. Also, where no e patentable is available, a summary thereof must be attached	copy of the amendments that y	eed would rende would render the	r the claims claims
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cc: Requester (if third party requester)	Examiner's signa	ature, if required	
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U.S. Patent and Trademark Office PTOL-474 (Rev. 04-01)

Ex Parte Reexamination Interview Summary

Paper No. 20071113 ⁺ Page 244 of 341

Application Number		Applicant(s)/Patent under Reexamination	
	90/007,617 5479441	5029183	
	Examiner / Art Unit		
	Roland G. Foster 3992		

Part of Paper No. 20071113

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re reexam of: U.S. Patent 5,029,183 LaRoy TYMES	Confirmation No.: 7501
Reexam Control No.: 90/007,617	Art Unit: 3992
Filed: July 6, 2005	Examiner: Foster, Roland G.
For: Packet Data Communication Network	Atty.Docket: 2319.065REX0

Reply to Final Office Action in *Ex Parte* Reexamination and Statement of Substance of Interview Under 37 C.F.R. § 1.560

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the final Office Action in *Ex Parte* Reexamination dated September 21, 2007, the Patent Owner submits the following Amendments to the Claims and Remarks.

In compliance with 37 C.F.R. § 1.560, Applicants submit the following Statement of Substance of Interview conducted on November 13, 2007 between Primary Examiner Roland G. Foster and Patent Owner's representatives, Robert E. Sokohl and Lori A. Gordon.

It is not believed that extensions of time or other fees are required. However, if any fees are necessary to prevent abandonment of this application, then such fees are hereby petitioned and hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments to the Patent Claims

Please amend claim 1 as follows:

1. (amended) A method of transmitting data packets from one of a plurality of remote terminal units in a power save mode of operation to a base station, comprising the steps of:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units,

wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

Please amend claim 21 as follows:

21. (amended) A system for transmitting data packets from one of a plurality of first stations to a second station wherein said plurality of first stations have a power save mode of operation in which said second station cannot initiate data communications with said plurality of first stations, comprising:

(a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;

(b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations,

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wherein said transmitting and receiving are performed during said power save mode of operation.

Please amend claim 40 as follows:

40. (amended) A method of data transmission between a plurality of terminals in a power save mode of operation and a base station, comprising the steps of:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; <u>and</u>

(b) [[(c)]] receiving said acknowledgement at said one terminal during said predetermined time window,

wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

Please amend claim 50 as follows:

50. (amended) A data communication system comprising:

(a) a host computer including a data communication input/output port;

(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;

(c) a plurality of remote units <u>having a power save mode of operation</u>, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window <u>during said power save</u> <u>mode of operation</u>, each of the remote units having:

(i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window,

wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.

Please amend claim 60 as follows:

60. (amended) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units <u>having a power save mode of operation</u>, each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations <u>during said</u> <u>power save mode of operation</u>, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet.

wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.

Please add the following claims:

85. (new) A method of data transmission between a plurality of terminals and a base station, comprising the steps of:

forming a data packet in a memory by expanding a multi-byte packet to create an expanded packet then producing in said memory an exclusive-OR of said expanded packet and a fixed pseudorandom sequence of bits;

transmitting said data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; and

receiving said acknowledgement at said one terminal during said predetermined time window,

wherein said transmitting is by wireless RF,

wherein said RF is modulated by the spread spectrum technique, and

wherein said spread spectrum technique employs a sequence of frequency shifts between two frequencies.

86. (new) A method according to claim 85 wherein said multi-byte packet includes the results of reading a bar code symbol.

87. (new) A data communication system comprising:

(a) a host computer including a data communication input/output port;

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(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;

(c) a plurality of remote units, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window, each of the remote units having:

(i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window,

wherein each one of said remote units is identified by a unique identifying code contained in said encoded RF signals transmitted by the remote unit, and wherein said base stations are responsive to said unique identifying code to allow only one of the base stations to send said RF acknowledge signals to each separate remote unit,

wherein each one of said base stations is responsive to all of the encoded RF

signals from all of the remote units within range, and detects the number of errors occurring in reception from each one of the remote units in said encoded RF signals, and

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wherein a representation of said number of errors is transmitted to other of said base stations via said communication link to specify the unique codes of remote units each base station is to be responsive to by sending said RF acknowledge signals, said information being derived from said representation of number of errors.

88. (new) A system according to claim 87 wherein at least some of said remote units are hand-held bar code readers.

89. (new) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet,

wherein said RF transmitter/receiver in said remote unit is activated by said

processor for detecting said RF acknowledge packet only during a fixed time window following transmission of said encoded RF signal packet,

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wherein said RF transmitter/receiver in a remote unit sends said RF signal packet only after receiving to detect any other RF signal from another remote unit which may be present,

wherein said base station decodes said RF signal packet while said RF signal packet is being received, and said remote unit decodes said RF acknowledge signal after said RF acknowledge signal has been received by accessing said memory via said processor, and

wherein said base station decodes said RF signal packet by loading detected data corresponding to the signal serially into a register and decoding bits of said register in parallel.

Status of Claims and Support for Claim Changes

Upon entry of the above amendment, claims 1-89 are currently pending with claims 1, 21, 40, 50, 60, 70, 76, 85, 87, and 89 being independent claims. Claims 1, 21, 40, 50, and 60 have been amended and new claims 85-89 have been added. The patentability of Original Patent Claims 45, 46, 58, 59, and 69-84 has been confirmed.

Support for the amendments to Original Patent Claims 1, 21, 40, 50, and 60 can be found, e.g., in the 5,029,183 Patent ("the '183 Patent) at col. 1, lines 48-50; col. 2, lines 17-20; col. 2, lines 61-col. 3, line 2; col. 6, lines 3-9; and col. 13, lines 25-29.

New independent claim 85 incorporates the subject matter of patentable Original Patent Claim 45 and all its intervening claims. Thus, support for new claim 85 can be found in Original Patent Claims 40 and 42-45.

New dependent claim 86 incorporates the subject matter of patentable Original Patent Claim 46. Thus, support for new claim 86 can be found in Original Patent Claim 46.

New independent claim 87 incorporates the subject matter of patentable Original Patent Claim 58 and all its intervening claims. Thus, support for new claim 87 can be found in Original Patent Claims 50 and 56-58.

New dependent claim 88 incorporates the subject matter of patentable Original Patent Claim 59. Thus, support for new claim 88 can be found in Original Patent Claim 59.

New independent claim 89 incorporates the subject matter of patentable Original Patent Claim 69 and all its intervening claims. Thus, support for new claim 89 can be found in Original Patent Claims 60 and 66-69.

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LaRoy TYMES

Remarks

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Claims 1-89 are currently pending in the reexamination proceeding of U.S. Patent No. 5,029,183 ("the '183 patent") with claims 1, 21, 40, 50, 60, 70, 76, 85, 87, and 89 being independent claims. Claims 1, 21, 40, 50, and 60 have been amended and new claims 85-89 have been added.

In the Reply to the First Office Action filed April 14, 2006 and the Reply to the Second Office Action filed April 9, 2007, the Patent Owner established that both the specification and the prosecution history clearly, deliberately, and precisely defined each of the terms "base station" and "second station" as a unit that transfer data with a remote terminal unit, but which cannot initiate data communications with a remote terminal unit in a power save mode of operation so the remote terminal unit can minimize power consumption. However, in the Final Office Action, the Examiner maintained the position that the definition of "base station" and "second station" argued by the Patent Owner is not clearly expressed in the specification and that statements made during prosecution of the application which led to the '183 patent cannot be used to construe claims in a reexamination proceeding. While the Patent Owner disagrees with the Examiner's position, the Patent Owner has amended independent claims 1, 21, 40, 50, and 60 to explicitly include the definition of the terms "base station" and "second station." Thus, the amendment is merely clarifying and does not change the scope of the amended claims. Accordingly, a new search is not required.

Because of the strength of the Patent Owner's claim construction position and the fact that the claim construction position argued by the Patent Owner is identical to the claim construction of the Honorable Chief Judge Sue L. Robinson in the *Symbol*

Technologies, Inc. v. Proxim, Inc. litigation, the Patent Owner did not believe (and continues to maintain) that the above claim amendments were not required. However, because the term of the '183 patent will expire in less than 2 years, a high likelihood exists that the term of the '183 patent will expire prior to the completion of the Appeal process. Therefore, to expedite confirmation of the claims in the present reexamination, the Patent Owner is now presenting the proposed amendments. The proposed amendments place all of the claims in condition where they are patentable. The Patent Owner respectfully requests that the Examiner enter the above amendments.

Based on the above amendments and following remarks, the Patent Owner respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. Statement of Substance of Interview

The Patent Owner thanks Primary Examiner Roland G. Foster for the courtesy extended to its representatives, Robert E. Sokohl, and Lori A. Gordon, in the interview held on November 13, 2007.

During that interview, the Patent Owner's representatives presented proposed claim amendments and explained the differences between the invention, as recited in the amended claims and the cited reference, U.S. Patent No. 4,771,448 to Koohgoli, et al. No agreement was reached.

II. Claim Rejections

A. Rejection Under §102(e) Over Koohgoli, et al

In the Office Action, claims 1, 2, 5-7, 9, 10, 14-18, 21, 22, 25-28, 35-37, 40-42, 47-50, 53, 54, 56, 57, 60, 63, and 66-69 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 4,771,448 ("Koohgoli"). The Patent Owner respectfully traverses this rejection.

For a prior art reference to anticipate the claimed invention, it must disclose each and every element as set forth in the claim. *See Finnigan Corp. v. United States Int'l Trade Comm'n*, 180 F.3d 1354, 1365-66 (Fed. Cir. 1999). The requirements of strict identity between the claim and the prior art reference, is not met if a single element or limitation required by the claim is missing from the prior art source. *See Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707,716 (Fed. Cir. 1984).

Koohgoli does not teach or even contemplate a power save mode of operation in which the base station cannot initiate data communications with a remote terminal unit so that the remote terminal unit can minimize power consumption. Neither the phrase "power save" nor the words "save" or "conserve" are used in Koohgoli. Instead, Koohgoli is directed to a private cellular system "developed in order to provide portable (cordless) telephone services to users normally served by a local PBX or CENTREX system." (Koohgoli, col. 5, lines 7-10). As such, the portable terminal units are designed to both originate and receive calls. (Koohgoli, col. 7, lines 41-44). As described below, for call reception, the base station in Koohgoli must be able to initiate data communication with the portables and therefore, the portables must be capable of receiving an unsolicited signaling message from the base station at any time.

As described in Koohgoli, "[t]he portables 16, when not in the 'talking' state, regularly transmit a REGistration message (REG)." (Koohgoli, col. 10, lines 18-19). In Koohgoli, "[r]egistration messages may be received by a number of base stations 13. Each base station 13 maintains a list of resident portables 16. This list is internal to every base station 13 and is not communicated to the switch 11." (Koohgoli, col. 10, lines 36-40). When a call is received for a portable 16 in Koohgoli, the "switch 11 broadcasts a Start Ringing message to all the base stations 13 using the land signaling channel ... Those base stations 13 which contain the called portable 16 ID in their resident list and have access to a free land information channel transmit a Radio Ringing message." (Koohgoli, col. 10, lines 47-59). The registration process of Koohgoli is designed to minimize traffic on the land signaling channel and to reduce the complexity of switch 11. (Koohgoli, col. 9, line 61 - col. 10, line 7). Koohgoli does not suggest a power save mode of operation during which a portable can reduce power consumption. Instead, Koohgoli teaches that a portable unit is driven to register as soon as the portable is operational in the system. Once a portable is registered with a base station, the base station is capable of initiating data communication.

The method of operation in Koohgoli is in contrast to the power save mode of operation recited in Patent Owner's independent claims 1, 21, 40, 50, and 60, an example of which is described in the specification as:

A packet-exchange protocol is used for this communications link that provides reduced power dissipation at the remote unit by activating the receive function for only a short time, rather than requiring the remote unit to receive or "listen" at all times ... In this protocol, the central station cannot initiate a packet transmission to a remote unit, but instead must wait until the remote unit has sent a transmitted packet, then the central station can reply in the rigid time window, attaching to the acknowledge signal the data it wishes to send to this remote unit. ('183 patent, col. 2, line 61-col. 3, line 2). As discussed above, Koohgoli does not teach or even suggest a system or method including a remote terminal having a power save mode of operation in which a base station cannot initiate data communications with the remote terminal as required by the amended independent claims 1, 21, 40, 50, and 60.

For at least these reasons, amended independent patent claims 1, 21, 40, 50, and 60 are patentable over Koohgoli. Claims 2, 5-7, 9, 10, and 14-18 depend from claim 1; claims 22, 25-28, and 35-37 depend from claim 21; claims 41, 42, and 47-49 depend from claim 40; claims 53, 54, 56, and 57 depend from claim 50; and claims 63 and 66-69 depend from claim 60. For at least these reasons and further in view of their own features, dependent claims 2, 5-7, 9, 10, 14-18, 22, 25-28, 35-37, 41, 42, 47-49, 53, 54, 56, 57, 63 and 66-69 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

B. Rejection Under §103 Over Koohgoli

In the Office Action, claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51, 52, 61, and 62 were rejected under 35 U.S.C. §103(a) as being unpatentable over Koohgoli. The Patent Owner respectfully traverses this rejection.

Claims 3, 4, 8, 11, 12, 13, 19, and 20 depend from claim 1; claims 23, 24, 30-33, 38, and 39 depend from claim 21; claim 43 depends from claim 40; claims 51 and 52 depend from claim 50 and claims 61 and 62 depend from claim 60. As discussed above, Koohgoli does not teach or suggest each and every element of amended independent patent claims 1, 21, 40, 50, and 60. For at least these reasons, and further in view of their own features, dependent claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51,

52, 61, and 62 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

C. Rejection Under §103 Over Koohgoli in view of Carlman, Jr., et al and further in view of Malcolm

In the Office Action, claims 55, 64, and 65 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Carlman, Jr., *et al*, U.S. Patent No. 4,777,488 (Carlman) and further in view of Malcolm, et al, U.S. Patent No. 4,332,027 (Malcolm). The Patent Owner respectfully traverses this rejection.

Claim 55 depends from claim 50 and claims 64 and 65 depend from claim 60. Amended independent claims 50 and 60 are distinguished from Koohgoli for the reasons set forth above. Neither Carlman nor Malcolm adds anything to Koohgoli to overcome the deficiencies of Koohgoli relative to independent claims 50 and 60 described above. Like Koohgoli, Carlman and Malcolm, alone or in combination, do not teach or even suggest a system or method including a remote terminal having a power save mode of operation in which a base station cannot initiate data communications with the remote terminal. For at least these reasons and further in view of their own features, dependent claims 55, 64, and 65 are patentable over the combination of Koohgoli, Carlman, and Malcolm. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

D. Rejection Under §103 Over Koohgoli and Shiff

In the Office Action, claim 44 was rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Shiff, U.S. Patent No. 4,587,661 (Shiff). The Patent Owner respectfully traverses this rejection. Claim 44 depends from claim 40. Amended independent patent claim 40 is distinguished from Koohgoli for the reasons set forth above. Shiff adds nothing to Koohgoli to overcome the deficiencies of Koohgoli described above. Like Koohgoli, Shiff does not teach or even suggest a system or method including a remote terminal having a power saving mode of operation in which a base station cannot initiate data communications with the remote terminal.

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For at least these reasons and further in view of its own features, dependent claim 44 is patentable over the combination of Koohgoli and Shiff. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

III. Patentable Subject Matter

The Patent Owner acknowledges with appreciation the Examiner's indication that claims 45, 46, 58, 59, and 69-84 are patentable. The Patent Owner has added new independent claim 85 which includes the subject matter of allowable Original Patent Claim 45, its base claim 40, and all its intervening claims (claims 42-44), new independent claim 87 which includes the subject matter of allowable Original Patent Claim 58, its base claim 50, and all its intervening claims (claims 56-57); and new independent claim 89 which includes the subject matter of allowable Original Patent Claim 69, its base claim 60, and all its intervening claims (claims 66-68). New dependent claim 86 includes the subject matter of allowable Original Patent Claim 46 and new dependent claim 88 includes the subject matter of allowable Original Patent Claim 59. Accordingly, new claims 85-89 are also patentable and their entry is respectfully requested.

IV. Related Proceedings

Claims 1, 16, 21, 35, and 40-41 of the '183 patent were the subject of prior litigation in the United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Proxim, Incorporated*, Civil Action No. 1:01-cv-00801-SLR. The Proxim litigation was settled following a jury verdict finding infringement by Proxim.

The '183 patent was previously asserted in United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Intermec Technologies Corporation*, Civil Action No. 1:05-cv-00147-SLR. The Intermec litigation was settled prior to trial.

The '183 patent was also previously asserted in two additional litigations in United States District Court for the District of Delaware: *Symbol Technologies, Inc. v. Hand Held Products,* Civil Action No. 1:03-cv-00102, filed January 21, 2003 and *Symbol Technologies, Inc. v. YDI Wireless Inc., et al*, Civil Action No. 1:05-cv-00755, filed October 28, 2005. Both litigations ended in settlement.

V. Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. The Patent Owner therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. The Patent Owner believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present reexamination proceeding is in condition for a Notice of Intent to Issue a Reexamination Certificate. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

- 18 -

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date: 50

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

<u>CERTIFICATION OF SERVICE OF REPLY TO FINAL OFFICE ACTION AND</u> <u>STATEMENT OF SUBSTANCE OF INTERVIEW UNDER 37 C.F.R. § 1.560</u>

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on November 21, 2007. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 2033 Gateway Place, Suite 400 San Jose, CA 95110

> > Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: November 21, 2007

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600 - 19 -

Electronic Acknowledgement Receipt					
EFS ID:	2501656				
Application Number:	90007617				
International Application Number:					
Confirmation Number:	7501				
Title of Invention:	PACKET DATA COMMUNICATION NETWORK				
First Named Inventor/Applicant Name:	5029183				
Customer Number:	26111				
Filer:	Lori Ann Gordon/Maya Bennett				
Filer Authorized By:	Lori Ann Gordon				
Attorney Docket Number:	2319.065REX0				
Receipt Date:	21-NOV-2007				
Filing Date:	06-JUL-2005				
Time Stamp:	17:21:16				
Application Type:	Application Type: Reexam (Third Party)				

Payment information:

Submitted wi	Submitted with Payment no				
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1		2319065REX0ReplytoFinalO	768463	VOC	20
I		fficeAction.pdf	bd6788d660b83285290999a8cb26364 00e2c9aec	yes	20

	Multipart Description/PDF files in .z	ip description	
	Document Description	Start	End
	Trans Letter filing of a response in a reexam	1	1
	Amendment After Final	2	2
	Claims	3	9
	Applicant Arguments/Remarks Made in an Amendment	10	19
	Reexam Certificate of Service	20	20
Warnings:			
Information:			
	Total Files Size (in bytes):	768	3463

similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



Robert Greene Sterne Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michele A. Cimbala Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee John M. Covert Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Judith U. Kim Jeffrey T. Helvey Eldora L. Ellison

Donald R. Banowit Peter A. Jackman Brian J. Del Buono Mark Fox Evens Vincent L. Capuano Elizabeth J. Haanes Michael D. Specht Kevin W. McCabe Gienn J. Perry Edward W. Yee Grant E. Reed Virgii Lee Beaston Theodore A. Wood Joseph S. Ostroff Jason D. Eisenberg Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cynthia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Laura A. Vogel Bashir M.S. Ali Shannon A. Carroll Anbar F. Khai Michelle K. Holoubek Marsha A. Rose Scott A. Schaller Lei Zhou W. Blake Coblentz James J. Pohl John T. Haran Mark W. Rygiel

Michael R. Malek* Garia Ji-Eun Kim Doyle A. Siever* Ulrike Winkler Jenks Paul A. Calvo Robert A. Schwartzman C. Matthew Rozier* Sharmeek Ghose Randall K. Baldwin Daniel J. Nevrivy <u>Registered Patent Agents</u>• Karen R. Markowicz Matthew J. Dowd Mitta Mukherjee Scott M. Woodhouse

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November 21, 2007

WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

> Re: Reexamination of U.S. Patent No. 5,029,183 Reexam Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: LaRoy TYMES Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Reply to Final Office Action in *Ex Parte* Reexamination and Statement of Substance of Interview under 37 C.F.R. § 1560;
- 2. Certification of Service on Third Party Requestor of Reply to Final Office Action and Statement of Substance of Interview under 37 C.F.R. § 1.560; and
- 3. Online Credit Card Payment Authorization for \$880.00 to cover: \$250.00 excess total claims fee; and \$630.00 excess independent claims fee.

The above-listed documents are filed electronically through EFS-Web.

Fee payment is provided through online credit card payment. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Electronic Patent Application Fee Transmittal						
Application Number:	90	90007617				
Filing Date:	06	-Jul-2005				
Title of Invention:	PACKET DATA COMMUNICATION NETWORK					
First Named Inventor/Applicant Name:	50	029183				
Filer:	Lori Ann Gordon/Maya Bennett					
Attorney Docket Number:	Attorney Docket Number: 2319.065REX0					
Filed as Large Entity						
ex parte reexam Filing Fees						
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)	
Basic Filing:						
Pages:						
Claims:						
Reexamination independent claims in exce		1821	3	210	630	
Reexamination Independent Claims for exc		1822	5	50	250	
Miscellaneous-Filing:						
Petition:						
Patent-Appeals-and-Interference:						
Post-Allowance-and-Post-Issuance: Page 268 of 341						

Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Extension-of-Time:					
Miscellaneous:					
Total in USD (\$)			880		

Electronic Acknowledgement Receipt				
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Customer Number:	26111			
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<u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

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TYMES et al. Reexam of Pat. No. 5,479,441 Reexam Control No.: 90/007,742

Amendments to the Patent Claims

- 2 -

Please amend claim 1 as follows:

1. (amended) A method of transmitting data packets from one of a plurality of remote terminal units in a power save mode of operation to a base station, comprising the steps of:

a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

b) receiving at said one unit from said base station a reply signal during a second time period occurring only during a selected time window after said first time period, said second time period being the same for at least some of said units wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

Please amend claim 7 as follows:

7. (amended) A system for transmitting data packets from one of a plurality of first stations to a second station wherein said plurality of first stations have a power save mode of operation in which said second station cannot initiate data communications with said plurality of first stations, comprising:

a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;

	TED STATES PATENT	AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspto.gov	OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	2319.065REX0	7501
26111 7.	590 12/10/2007		EXAM	INER
-	SSLER, GOLDSTEIN RK AVENUE, N.W.	& FOX P.L.L.C.		
	N, DC 20005		ART UNIT	PAPER NUMBER
			DATE MAILED: 12/10/200	7

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



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Edward C. Kwok

Macpherson Kwok Chen & Heid LLP

1762 Technology Drive Suite 226

San Jose CA 95121

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/007,617.

PATENT NO. <u>5029183</u>.

ART UNIT <u>3992</u>.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

······	Control No.	Patent Under Reexamination				
Ex Parte Reexamination	90/007,617	5029183				
Advisory Action	Examiner	Art Unit				
Before the Filing of an Appeal Brief	Roland G. Foster	3992				
The MAILING DATE of this communication and						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address THE PROPOSED RESPONSE FILED <u>21 November 2007</u> FAILS TO OVERCOME ALL OF THE REJECTIONS IN THE FINAL REJECTION MAILED 21 Soutember 2007						
 THE FINAL REJECTION MAILED <u>21 September 2007</u>. Unless a timely appeal is filed, or other appropriate action by the patent owner is taken to overcome all of the outstanding rejection(s), this prosecution of the present <i>ex parte</i> reexamination proceeding WILL BE TERMINATED and a Notice of Intent to Issue <i>Ex Parte</i> Reexamination Certificate will be mailed in due course. Any finally rejected claims, or claims objected to, will be CANCELLED. 						
THE PERIOD FOR RESPONSE IS EXTENDED TO RUN <u>3</u> Mo time are governed by 37 CFR 1.550(c).	ONTHS FROM THE MAILING DATE OF	THE FINAL REJECTION. Extensions of				
NOTICE OF APPEAL						
 An Appeal Brief is due two months from the date of appeal. See 37 CFR 41.37(a). Extensions of time a AMENDMENTS 						
AMENDMENTS 3. X The proposed amendment(s) filed after a final actio	n, but prior to the date of filing a	brief will not be entered bacquise:				
 (a) The proposed amendment(s) med after a final action (a) They raise new issues that would require further (b) They raise the issue of new matter (see NOTE be (c) They are not deemed to place the proceeding in 1 issues for appeal; and/or (d) They present additional claims without canceling NOTE: (See 37 CFR 1.116 and 41.33(a)). 	consideration and/or search (see elow); better form for appeal by materia	NOTE below); Ily reducing or simplifying the				
4. Patent owner's proposed response filed has a	overcome the following rejection(s):				
5. The proposed new or amended claim(s) wou canceling the non-allowable claim(s).	•••					
 6. ∑ For purposes of appeal, the proposed amendment(s) a) ∑ will not be entered, or b) □ will be entered and an explanation of how the new or amended claim(s) would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) patentable and/or confirmed: Claim(s) objected to: Claim(s) rejected: Claim(s) not subject to reexamination: 						
AFFIDAVIT OR OTHER EVIDENCE						
 The affidavit or other evidence filed after a final acti entered because patent owner failed to provide a s evidence is necessary and was not earlier presented 	howing of good and sufficient rea	ling a Notice of Appeal will <u>not</u> be asons why the affidavit or other				
8. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence fails to overcome all rejections under appeal and/or appellant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).						
9. 🗌 The affidavit or other evidence is entered. An explanation	nation of the status of the claims	after entry is below or attached.				
REQUEST FOR RECONSIDERATION/OTHER						
10. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:						
11. D Note the attached Information Disclosure Statement(s), PTO/SB/08, Paper No(s)						
12. 🗌 Other:						
CONFE	ESK Prima	5				
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cc: Requester (if third party requester)	- Alt U					

U.S. Patent and Trademark Office PTOL-467 (Rev. 08-06) Ex Parte Reexamination Advisory Action Before the Filing of an Appeal Brief

Part of Paper No. 20071130 Page 275 of 341

Continuation of 3.(d) NOTE:

The Patent Owner proposes to amend various independent claims to explicitly include the definition of the terms "base station" and "second station" that the Patent Owner previously argued were required when interpreting those terms. See page 10 of the Patent Owner remarks for additional details.

It is intended that prosecution before the examiner in a reexamination proceeding will be concluded with the final action. Consideration of amendments submitted after final rejection and prior to, or with, the appeal will be governed by the strict standards of 37 CFR 1.116. MPEP § 2272. 37 CFR 1.116(b), in turn, states in part "[a]n amendment touching the merits of the application or patent under reexamination may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented."

Here, the proposed amendment clearly touches on the merits of the patent under reexamination, as the claims stand rejected based on claim interpretations that do not require the specific definitions previously argued by the Patent Owner. Thus, the Patent Owner must make a showing of good and sufficient reasons why the amendment is necessary and not earlier presented, which the Patent Owner has failed to do. Indeed, the Patent Owner has not presented a showing.

Rather, on page 11 of the remarks, the Patent Owner admits that the "Patent Owner did not believe (and continues to maintain) that the above claim amendments were not required." Thus, the Patent Owner has admitted that the proposed amendment is not necessary. Thus, the Patent Owner cannot show the proposed amendment to now be necessary.

Furthermore on page 11 of the remarks, the Patent Owner admits that "because the term of the '183 patent will expire in less than 2 years, a high likelihood exists that the term of the '183 patent will expire prior to the completion of the Appeal process." Therefore, to expedite confirmation of the claims in the present reexamination, the Patent Owner is now presenting the proposed amendment." Besides not being a showing of why the amendment was not earlier presented, the length of the appeal process should have been known the Patent Owner and thus tends to show that the amendment could have been earlier presented.

Thus, the Patent Owner has not made (and cannot make) a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented.

ROLAND G. FOSTER CRU EXAMINER-AU 3992 Page 276 of 341

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183 LaRoy TYMES

Reexam Control No.: 90/007,617

Filed: July 6, 2005

For: Packet Data Communication Network Confirmation No.: 7501

Art Unit: 3992

Examiner: Foster, Roland G.

Atty.Docket: 2319.065REX0

Reply to Final Office Action in *Ex Parte* Reexamination and Statement of Substance of Interview Under 37 C.F.R. § 1.560

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In reply to the final Office Action in *Ex Parte* Reexamination dated September 21, 2007, the Patent Owner submits the following Amendments to the Claims and Remarks.

In compliance with 37 C.F.R. § 1.560, Applicants submit the following Statement of Substance of Interview conducted on November 13, 2007 between Primary Examiner Roland G. Foster and Patent Owner's representatives, Robert E. Sokohl and Lori A. Gordon.

It is not believed that extensions of time or other fees are required. However, if any fees are necessary to prevent abandonment of this application, then such fees are hereby petitioned and hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments to the Patent Claims

Please amend claim 1 as follows:

1. (amended) A method of transmitting data packets from one of a plurality of remote terminal units in a power save mode of operation to a base station, comprising the steps of:

(a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;

(b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units,

wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

Please amend claim 21 as follows:

21. (amended) A system for transmitting data packets from one of a plurality of first stations to a second station wherein said plurality of first stations have a power save mode of operation in which said second station cannot initiate data communications with said plurality of first stations, comprising:

(a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;

(b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations,

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wherein said transmitting and receiving are performed during said power save mode of operation.

Please amend claim 40 as follows:

40. (amended) A method of data transmission between a plurality of terminals in a power save mode of operation and a base station, comprising the steps of:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; <u>and</u>

(b) [[(c)]] receiving said acknowledgement at said one terminal during said predetermined time window,

wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

Please amend claim 50 as follows:

50. (amended) A data communication system comprising:

(a) a host computer including a data communication input/output port;

(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data

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communication input/output port and said data communications link;

(c) a plurality of remote units <u>having a power save mode of operation</u>, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window <u>during said power save</u> <u>mode of operation</u>, each of the remote units having:

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(i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window,

wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.

Please amend claim 60 as follows:

60. (amended) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units <u>having a power save mode of operation</u>, each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations <u>during said</u> <u>power save mode of operation</u>, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet,

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wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.

Please add the following claims:

85. (new) A method of data transmission between a plurality of terminals and a base station, comprising the steps of:

forming a data packet in a memory by expanding a multi-byte packet to create an expanded packet then producing in said memory an exclusive-OR of said expanded packet and a fixed pseudorandom sequence of bits;

transmitting said data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; and

receiving said acknowledgement at said one terminal during said predetermined time window,

wherein said transmitting is by wireless RF,

wherein said RF is modulated by the spread spectrum technique, and

wherein said spread spectrum technique employs a sequence of frequency shifts between two frequencies.

86. (new) A method according to claim 85 wherein said multi-byte packet includes the results of reading a bar code symbol.

87. (new) A data communication system comprising:

(a) a host computer including a data communication input/output port;

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(b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;

(c) a plurality of remote units, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window, each of the remote units having:

(i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window,

wherein each one of said remote units is identified by a unique identifying code contained in said encoded RF signals transmitted by the remote unit, and wherein said base stations are responsive to said unique identifying code to allow only one of the base stations to send said RF acknowledge signals to each separate remote unit,

wherein each one of said base stations is responsive to all of the encoded RF

signals from all of the remote units within range, and detects the number of errors occurring in reception from each one of the remote units in said encoded RF signals, and

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wherein a representation of said number of errors is transmitted to other of said base stations via said communication link to specify the unique codes of remote units each base station is to be responsive to by sending said RF acknowledge signals, said information being derived from said representation of number of errors.

88. (new) A system according to claim 87 wherein at least some of said remote units are hand-held bar code readers.

89. (new) A data communication system comprising:

(a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;

(b) a plurality of remote units each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations, each of the remote units having:

(i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;

(ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet,

wherein said RF transmitter/receiver in said remote unit is activated by said

processor for detecting said RF acknowledge packet only during a fixed time window following transmission of said encoded RF signal packet,

wherein said RF transmitter/receiver in a remote unit sends said RF signal packet only after receiving to detect any other RF signal from another remote unit which may be present.

wherein said base station decodes said RF signal packet while said RF signal packet is being received, and said remote unit decodes said RF acknowledge signal after said RF acknowledge signal has been received by accessing said memory via said processor, and

wherein said base station decodes said RF signal packet by loading detected data corresponding to the signal serially into a register and decoding bits of said register in parallel.

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Status of Claims and Support for Claim Changes

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Upon entry of the above amendment, claims 1-89 are currently pending with claims 1, 21, 40, 50, 60, 70, 76, 85, 87, and 89 being independent claims. Claims 1, 21, 40, 50, and 60 have been amended and new claims 85-89 have been added. The patentability of Original Patent Claims 45, 46, 58, 59, and 69-84 has been confirmed.

Support for the amendments to Original Patent Claims 1, 21, 40, 50, and 60 can be found, e.g., in the 5,029,183 Patent ("the '183 Patent) at col. 1, lines 48-50; col. 2, lines 17-20; col. 2, lines 61-col. 3, line 2; col. 6, lines 3-9; and col. 13, lines 25-29.

New independent claim 85 incorporates the subject matter of patentable Original Patent Claim 45 and all its intervening claims. Thus, support for new claim 85 can be found in Original Patent Claims 40 and 42-45.

New dependent claim 86 incorporates the subject matter of patentable Original Patent Claim 46. Thus, support for new claim 86 can be found in Original Patent Claim 46.

New independent claim 87 incorporates the subject matter of patentable Original Patent Claim 58 and all its intervening claims. Thus, support for new claim 87 can be found in Original Patent Claims 50 and 56-58.

New dependent claim 88 incorporates the subject matter of patentable Original Patent Claim 59. Thus, support for new claim 88 can be found in Original Patent Claim 59.

New independent claim 89 incorporates the subject matter of patentable Original Patent Claim 69 and all its intervening claims. Thus, support for new claim 89 can be found in Original Patent Claims 60 and 66-69.

Remarks

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Claims 1-89 are currently pending in the reexamination proceeding of U.S. Patent No. 5,029,183 ("the '183 patent") with claims 1, 21, 40, 50, 60, 70, 76, 85, 87, and 89 being independent claims. Claims 1, 21, 40, 50, and 60 have been amended and new claims 85-89 have been added.

In the Reply to the First Office Action filed April 14, 2006 and the Reply to the Second Office Action filed April 9, 2007, the Patent Owner established that both the specification and the prosecution history clearly, deliberately, and precisely defined each of the terms "base station" and "second station" as a unit that transfer data with a remote terminal unit, but which cannot initiate data communications with a remote terminal unit in a power save mode of operation so the remote terminal unit can minimize power consumption. However, in the Final Office Action, the Examiner maintained the position that the definition of "base station" and "second station" argued by the Patent Owner is not clearly expressed in the specification and that statements made during prosecution of the application which led to the '183 patent cannot be used to construe claims in a reexamination proceeding. While the Patent Owner disagrees with the Examiner's position, the Patent Owner has amended independent claims 1, 21, 40, 50, and 60 to explicitly include the definition of the terms "base station" and "second station." Thus, the amendment is merely clarifying and does not change the scope of the amended claims. Accordingly, a new search is not required.

Because of the strength of the Patent Owner's claim construction position and the fact that the claim construction position argued by the Patent Owner is identical to the claim construction of the Honorable Chief Judge Sue L. Robinson in the *Symbol*

Technologies, Inc. v. Proxim, Inc. litigation, the Patent Owner did not believe (and continues to maintain) that the above claim amendments were not required. However, because the term of the '183 patent will expire in less than 2 years, a high likelihood exists that the term of the '183 patent will expire prior to the completion of the Appeal process. Therefore, to expedite confirmation of the claims in the present reexamination, the Patent Owner is now presenting the proposed amendments. The proposed amendments place all of the claims in condition where they are patentable. The Patent Owner respectfully requests that the Examiner enter the above amendments.

Based on the above amendments and following remarks, the Patent Owner respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. Statement of Substance of Interview

The Patent Owner thanks Primary Examiner Roland G. Foster for the courtesy extended to its representatives, Robert E. Sokohl, and Lori A. Gordon, in the interview held on November 13, 2007.

During that interview, the Patent Owner's representatives presented proposed claim amendments and explained the differences between the invention, as recited in the amended claims and the cited reference, U.S. Patent No. 4,771,448 to Koohgoli, et al. No agreement was reached.

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II. Claim Rejections

A. Rejection Under §102(e) Over Koohgoli, et al

In the Office Action, claims 1, 2, 5-7, 9, 10, 14-18, 21, 22, 25-28, 35-37, 40-42, 47-50, 53, 54, 56, 57, 60, 63, and 66-69 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 4,771,448 ("Koohgoli"). The Patent Owner respectfully traverses this rejection.

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For a prior art reference to anticipate the claimed invention, it must disclose each and every element as set forth in the claim. *See Finnigan Corp. v. United States Int'l Trade Comm'n*, 180 F.3d 1354, 1365-66 (Fed. Cir. 1999). The requirements of strict identity between the claim and the prior art reference, is not met if a single element or limitation required by the claim is missing from the prior art source. *See Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707,716 (Fed. Cir. 1984).

Koohgoli does not teach or even contemplate a power save mode of operation in which the base station cannot initiate data communications with a remote terminal unit so that the remote terminal unit can minimize power consumption. Neither the phrase "power save" nor the words "save" or "conserve" are used in Koohgoli. Instead, Koohgoli is directed to a private cellular system "developed in order to provide portable (cordless) telephone services to users normally served by a local PBX or CENTREX system." (Koohgoli, col. 5, lines 7-10). As such, the portable terminal units are designed to both originate and receive calls. (Koohgoli, col. 7, lines 41-44). As described below, for call reception, the base station in Koohgoli must be able to initiate data communication with the portables and therefore, the portables must be capable of receiving an unsolicited signaling message from the base station at any time.

As described in Koohgoli, "[t]he portables 16, when not in the 'talking' state, regularly transmit a REGistration message (REG)." (Koohgoli, col. 10, lines 18-19). In Koohgoli, "[r]egistration messages may be received by a number of base stations 13. Each base station 13 maintains a list of resident portables 16. This list is internal to every base station 13 and is not communicated to the switch 11." (Koohgoli, col. 10, lines 36-40). When a call is received for a portable 16 in Koohgoli, the "switch 11 broadcasts a Start Ringing message to all the base stations 13 using the land signaling channel ... Those base stations 13 which contain the called portable 16 ID in their resident list and have access to a free land information channel transmit a Radio Ringing message." (Koohgoli, col. 10, lines 47-59). The registration process of Koohgoli is designed to minimize traffic on the land signaling channel and to reduce the complexity of switch 11. (Koohgoli, col. 9, line 61 – col. 10, line 7). Koohgoli does not suggest a power save mode of operation during which a portable can reduce power consumption. Instead, Koohgoli teaches that a portable unit is driven to register as soon as the portable is operational in the system. Once a portable is registered with a base station, the base station is capable of initiating data communication.

The method of operation in Koohgoli is in contrast to the power save mode of operation recited in Patent Owner's independent claims 1, 21, 40, 50, and 60, an example of which is described in the specification as:

A packet-exchange protocol is used for this communications link that provides reduced power dissipation at the remote unit by activating the receive function for only a short time, rather than requiring the remote unit to receive or "listen" at all times ... In this protocol, the central station cannot initiate a packet transmission to a remote unit, but instead must wait until the remote unit has sent a transmitted packet, then the central station can reply in the rigid time window, attaching to the acknowledge signal the data it wishes to send to this remote unit.

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('183 patent, col. 2, line 61-col. 3, line 2). As discussed above, Koohgoli does not teach or even suggest a system or method including a remote terminal having a power save mode of operation in which a base station cannot initiate data communications with the remote terminal as required by the amended independent claims 1, 21, 40, 50, and 60.

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For at least these reasons, amended independent patent claims 1, 21, 40, 50, and 60 are patentable over Koohgoli. Claims 2, 5-7, 9, 10, and 14-18 depend from claim 1; claims 22, 25-28, and 35-37 depend from claim 21; claims 41, 42, and 47-49 depend from claim 40; claims 53, 54, 56, and 57 depend from claim 50; and claims 63 and 66-69 depend from claim 60. For at least these reasons and further in view of their own features, dependent claims 2, 5-7, 9, 10, 14-18, 22, 25-28, 35-37, 41, 42, 47-49, 53, 54, 56, 57, 63 and 66-69 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

B. Rejection Under §103 Over Koohgoli

In the Office Action, claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51, 52, 61, and 62 were rejected under 35 U.S.C. §103(a) as being unpatentable over Koohgoli. The Patent Owner respectfully traverses this rejection.

Claims 3, 4, 8, 11, 12, 13, 19, and 20 depend from claim 1; claims 23, 24, 30-33, 38, and 39 depend from claim 21; claim 43 depends from claim 40; claims 51 and 52 depend from claim 50 and claims 61 and 62 depend from claim 60. As discussed above, Koohgoli does not teach or suggest each and every element of amended independent patent claims 1, 21, 40, 50, and 60. For at least these reasons, and further in view of their own features, dependent claims 3, 4, 8, 11, 12, 13, 19, 20, 23, 24, 30-33, 38, 39, 43, 51,

52, 61, and 62 are patentable over Koohgoli. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

- 15 -

C. Rejection Under §103 Over Koohgoli in view of Carlman, Jr., et al and further in view of Malcolm

In the Office Action, claims 55, 64, and 65 were rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Carlman, Jr., *et al*, U.S. Patent No. 4,777,488 (Carlman) and further in view of Malcolm, et al, U.S. Patent No. 4,332,027 (Malcolm). The Patent Owner respectfully traverses this rejection.

Claim 55 depends from claim 50 and claims 64 and 65 depend from claim 60. Amended independent claims 50 and 60 are distinguished from Koohgoli for the reasons set forth above. Neither Carlman nor Malcolm adds anything to Koohgoli to overcome the deficiencies of Koohgoli relative to independent claims 50 and 60 described above. Like Koohgoli, Carlman and Malcolm, alone or in combination, do not teach or even suggest a system or method including a remote terminal having a power save mode of operation in which a base station cannot initiate data communications with the remote terminal. For at least these reasons and further in view of their own features, dependent claims 55, 64, and 65 are patentable over the combination of Koohgoli, Carlman, and Malcolm. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

D. Rejection Under §103 Over Koohgoli and Shiff

In the Office Action, claim 44 was rejected under 35 U.S.C. § 103 as being unpatentable over Koohgoli in view of Shiff, U.S. Patent No. 4,587,661 (Shiff). The Patent Owner respectfully traverses this rejection.

Claim 44 depends from claim 40. Amended independent patent claim 40 is distinguished from Koohgoli for the reasons set forth above. Shiff adds nothing to Koohgoli to overcome the deficiencies of Koohgoli described above. Like Koohgoli, Shiff does not teach or even suggest a system or method including a remote terminal having a power saving mode of operation in which a base station cannot initiate data communications with the remote terminal.

- 16 -

For at least these reasons and further in view of its own features, dependent claim 44 is patentable over the combination of Koohgoli and Shiff. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

III. Patentable Subject Matter

The Patent Owner acknowledges with appreciation the Examiner's indication that claims 45, 46, 58, 59, and 69-84 are patentable. The Patent Owner has added new independent claim 85 which includes the subject matter of allowable Original Patent Claim 45, its base claim 40, and all its intervening claims (claims 42-44), new independent claim 87 which includes the subject matter of allowable Original Patent Claim 58, its base claim 50, and all its intervening claims (claims 56-57); and new independent claim 89 which includes the subject matter of allowable Original Patent Claim 69, its base claim 60, and all its intervening claims (claims 66-68). New dependent claim 86 includes the subject matter of allowable Original Patent Claim 59. Accordingly, new claims 85-89 are also patentable and their entry is respectfully requested.

IV. Related Proceedings

Claims 1, 16, 21, 35, and 40-41 of the '183 patent were the subject of prior litigation in the United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Proxim, Incorporated*, Civil Action No. 1:01-cv-00801-SLR. The Proxim litigation was settled following a jury verdict finding infringement by Proxim.

- 17 -

The '183 patent was previously asserted in United States District Court for the District of Delaware, *Symbol Technologies, Inc. v. Intermec Technologies Corporation*, Civil Action No. 1:05-cv-00147-SLR. The Intermec litigation was settled prior to trial.

The '183 patent was also previously asserted in two additional litigations in United States District Court for the District of Delaware: *Symbol Technologies, Inc. v. Hand Held Products,* Civil Action No. 1:03-cv-00102, filed January 21, 2003 and *Symbol Technologies, Inc. v. YDI Wireless Inc., et al*, Civil Action No. 1:05-cv-00755, filed October 28, 2005. Both litigations ended in settlement.

V. Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. The Patent Owner therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. The Patent Owner believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present reexamination proceeding is in condition for a Notice of Intent to Issue a Reexamination Certificate. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

- 18 -

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert E. Sokohl Attorney for Patent Owner Registration No. 36,013

Date: 50

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATION OF SERVICE OF REPLY TO FINAL OFFICE ACTION AND STATEMENT OF SUBSTANCE OF INTERVIEW UNDER 37 C.F.R. § 1.560

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on November 21, 2007. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 2033 Gateway Place, Suite 400 San Jose, CA 95110

> > Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: November 21, 2007

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600 - 19 -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexam of: U.S. Patent 5,029,183 (LaRoy TYMES)	Confirmation No.: 7501
Reexam Control No.: 90/007,617	Art Unit: 3992
Filed: July 6, 2005 For: Packet Data Communication Network	Examiner: Roland G. Foster Atty. Docket No.: 2319.065REX0

Notice of Appeal From the Examiner to the Board of Patent Appeals and Interferences – Large Entity

Attn: Central Reexamination Unit Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Mail Stop: Ex Parte Reexam

Dear Sir:

The Patent Owner hereby appeals to the Board of Patent Appeals and Interferences from the final decision of the Examiner dated September 21, 2007, in which claims 1-44, 47-57, and 60-68 were finally or twice rejected.

The Patent Owner is concurrently filing a Petition Under 37 C.F.R. §1.182 for a Request for Continued Reexamination (RCR). The present Notice of Appeal is being filed to allow sufficient time for a decision on the petition to be provided.

The fee (for a large entity) for filing a Notice of Appeal from the Examiner to the Board of Patent Appeals and Interferences (37 C.F.R. § 41.20(b)(1)), along with any necessary extension fees (37 C.F.R. § 1.17(a)), is provided via Credit Card.

Per M.P.E.P §2272, an automatic one-month extension was granted upon filing of a Reply to the Final Office Action on November 21, 2007. The extension of time until December 21, 2007 (3 months from mailing date of final rejection) was acknowledged by the Examiner in the Advisory Action issued on December 10, 2007. The Patent Owner believes that no further extensions of time are required.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert E. Sokohl Attorney for Applicant Registration No.

Date: ______ December 19, 2007_____

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

ι.•

Patent Under Reexamination: 5,029,183 Reexamination Control No.: 90/007,617 Examiner: Roland G. Foster Art Unit: 3992

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

<u>CERTIFICATION OF SERVICE OF NOTICE OF APPEAL</u></u>

In compliance with 37 C.F.R. § 1.550(f), the undersigned, on behalf of the patent owner, hereby certifies that a copy of this paper has been served on the third-party requester by first class mail on December 19, 2007. The name and address of the party served is as follows:

> Edward C. Kwok Macpherson, Kwok, Chen, & Heid LLP 2033 Gateway Place, Suite 400 San Jose, CA 95110

> > Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

Date: December 19, 2007

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

Electronic Patent Application Fee Transmittal					
Application Number:	90007617				
Filing Date:	06	06-Jul-2005			
Title of Invention:	PACKET DATA COMMUNICATION NETWORK				
First Named Inventor/Applicant Name:	5029183				
Filer:	Lori Ann Gordon/Kim Perry				
Attorney Docket Number:	2319.065REX0				
Filed as Large Entity					
ex parte reexam Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Petition fee- 37 CFR 1.17(f) (Group I)		1462	1	400	400
Patent-Appeals-and-Interference:					
Notice of appeal		1401	1	510	510
Post-Allowance-and-Post-Issuance:				Page 2	99 of 341

Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Extension-of-Time:					
Miscellaneous:					
Total in USD (\$)			910		

Electronic Acknowledgement Receipt			
EFS ID:	2618217		
Application Number:	90007617		
International Application Number:			
Confirmation Number:	7501		
Title of Invention:	PACKET DATA COMMUNICATION NETWORK		
First Named Inventor/Applicant Name:	5029183		
Customer Number:	26111		
Filer:	Lori Ann Gordon/Kim Perry		
Filer Authorized By:	Lori Ann Gordon		
Attorney Docket Number:	2319.065REX0		
Receipt Date:	19-DEC-2007		
Filing Date:	06-JUL-2005		
Time Stamp:	20:04:55		
Application Type:	Reexam (Patent Owner)		

Payment information:

Submitted wi		yes			
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Document Number	Document Description	File Name	File Size(Bytes) Multi Pages /Message Digest ^{ge} Part /?zip ⁴ (if appl.)		

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	Multipa	rt Description/PDF files in	.zip description			
	Document Description		Start	E	ind	
	Reexam Miscellaneous Incoming Letter		1		2	
	Receipt of Petition	in a Reexam	3		5	
	Reexam Certificat	e of Service	6		6	
	Reexam Response to	Final Rejection	7	:	24	
	Reexam Certificat	e of Service	25	:	25	
	Notice of Appeal - Requester		26	:	27	
	Reexam Certificate of Service		28	:	28	
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Warnings:			•			
Information	:					
		Total Files Size (in bytes)	: 94	40234		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. New Applications Under 35 U.S.C. 111 If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. National Stage of an International Application under 35 U.S.C. 371 If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. New International Application Filed with the USPTO as a Receiving Office						
component Internationa course, sub	If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					



Robert Greene Sterne Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michaele A. Cimbala Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee John M. Covert Robert C. Millonig Donald J. Featherstone Timothy J. Shea, Jr Michael V. Messinger Judith U. Kim Jeffrey T. Helvey Eldora L. Ellison Donald R. Banowit Peter A. Jackman Brian J. Del Buono Mark Fox Evens Vincent L. Capuano Elizabeth J. Haanes Michael D. Specht Kevin W. McCabe Glenn J. Perry Edward W. Yee Grant E. Reed Virgil Lee Beaston Theodore A. Wood Joseph S. Ostroff Jason D. Eisenberg Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cymlinia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Laura A. Vogel Bashir M.S. Ali Shannon A. Carroll Anbar F. Khaj Michelle K. Holoubek Marsha A. Rose Scott A. Schailer Lei Zhou W. Blake Coblentz James J. Pohl John T. Haran Mark W. Rygiel

Michael R. Malek* Carla Ji-Eun Kim Doyle A. Siever* Ulrike Winkter Jenks Paul A. Calvo Robert A. Schwartzman C. Matthew Rozier* Shameek Ghose Randall K. Baldwin Daniel J. Nevrivy

Registered Patent Agents -Karen R. Markowicz Matthew J. Dowd Mita Mukherjee Scott M. Woodhouse Peter A. Socarras Jeffrey K. Mills Danielle L. Letting Lori Brandes Steven C. Oppenheimer Aaron S. Lukas Gaurav Asthana Robert E. Bakin Salvador M. Bezos

<u>Of Counsel</u> Edward J. Kessler Kenneth C. Bass III Marvin C. Guthrie Christopher P. Wrist

*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

December 19, 2007

WRITER'S DIRECT NUMBER: (202) 772-8677 INTERNET ADDRESS: RSOKOHL@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

> Re: Reexamination of U.S. Patent No. 5,029,183 Reexam Control No. 90/007,617; Filed: July 6, 2005 For: **Packet Data Communication Network** Inventor: LaRoy TYMES Our Ref: 2319.065REX0

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Petition under 37 C.F.R. § 1.182 Request for Continued Reexamination with a copy of Reply to final Office Action in *Ex Parte* Reexamination and Statement of Substance of Interview under 37 C.F.R. § 1.560 filed November 21, 2007;
- 2. Certification of Service on Third Party Requestor of Petition under 37 C.F.R. § 1.182;
- 3. Notice of Appeal from the Examiner to the Board of Patent Appeals and Interferences Large Entity;
- 4. Certification of Service of Notice of Appeal; and
- 5. Online Credit Card Payment Authorization for \$910.00 to cover: \$400.00 petition fee; and \$510.00 Notice of Appeal.

The above-listed documents are filed electronically through EFS-Web.

Commissioner for Patents December 19, 2007 Page 2

Fee payment is provided through online credit card payment. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert Sokohl Attorney for Patent Owner Registration No. 36,013

RES/LAG:mlb Enclosures 760464_1.DOC



COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE P.O. BOX 1450 ALEXANDRIA, VA 22313-1450 WWW.usplo.gov

JAN 152008

MAILED

Robert E. Sokohl Sterne, Kessler, Goldstein & Fox PLLC CENTRAL REEXAMINATION UNIT 1100 New York Ave., NW (For Patent Owner) Washington, DC 20005

Edward C. Kwok MacPherson Kwok Chen & Heidi LLP 1762 Technology Dr., Suite 226 San Jose, CA 95110

(For Third Party Requester)

Ex parte LaRoy Tymes Reexamination Proceeding Control No.: 90/007,617 Filed: July 6, 2005 For: U.S. Patent 5,029,183 : DECISION ON PETITION : TO CONTINUE

- : EX PARTE
- : REEXAMINATION
- : PROCEEDINGS

This is a decision on the December 19, 2007 patent owner Petition Under 37 CFR 1.182 and Request for Continued Reexamination.

The petition is before the Office of Patent Legal Administration.

The petition fee of \$400 set forth in 37 CFR 1.17(f) for the present petition under 37 CFR 1.182 has been charged to patent owner's credit card, pursuant to petitioner's instructions, as has been the notice of appeal fee of \$510.

For the reasons set forth below, the petition under 37 CFR 1.182 is granted.

REVIEW OF FACTS

- 1) U.S. Patent No. 5,029,183 (the '183 patent) issued on July 2, 1991.
- 2) The '183 patent has been the subject of four court proceedings, which are all now closed.
- 3) A request for *ex parte* reexamination of the '183 patent was filed by a third party requester on July 6, 2005, and assigned control number 90/007,617 (the '7.617 proceeding).
- 4) An Order granting reexamination in the '7617 proceeding was mailed on

September 16, 2005.

- 5) There have been two non-final Office actions in the '7617 proceeding. In addition, a final Office action was mailed September 21, 2007.
- 6) An examiner interview was conducted with patent owner on November 13, 2007.
- 7) Patent owner then responded to the final Office action on November 21, 2007.
- 8) On December 10, 2007, an advisory action was mailed indicating that the amendments to the claims filed after the final Office action would not be entered because they were directed to the merits of the patent and the patent owner failed to make a showing of good and sufficient reasons why the amendment was necessary and not earlier presented.
- 9) The present petition to request continued reexamination of the '183 patent was filed on December 19, 2007, along with a notice of appeal to allow sufficient time for a decision to made on this petition. The petition asserts that the amendment filed November 21, 2007, advances prosecution of the reexamination proceeding by amending the claims to explicitly recite the meaning of certain claim terms and to add new claims corresponding in scope to the claims already confirmed as to patentability in the '7617 proceeding.

DECISION ON PETITION UNDER 37 CFR 1.182

In the present petition, it is requested that the Office continue the prosecution of the instant reexamination proceeding to provide consideration of the November 21, 2007 response.¹

In March of 2005, the Office issued a Notice titled "Notice of Changes in Requirement for a Substantial New Question of Patentability for a Second or Subsequent Request for Reexamination While an Earlier Filed Reexamination is Pending."² Notice was provided therein that a second (or subsequent) reexamination would no longer be ordered on the basis of a "substantial new question of patentability" (SNQ) that is the same as a SNQ raised in an earlier pending reexamination. Notice was also provided therein that a patent owner could file a petition under 37 CFR 1.182 requesting continued prosecution on the merits in the reexamination proceeding to seek entry of an amendment and/or evidence that was denied entry after a final rejection in an *ex parte* reexamination proceeding, or after an action closing prosecution in an *inter partes* reexamination proceeding.

¹ Item 7 in the Review of Facts.

² 1292 Off. Gaz. Pat. Office 20, March 1, 2005.

By filing such a petition, the patent owner could obtain continued prosecution on the merits in the reexamination proceeding, including entry of the amendment and/or evidence that was denied entry after a final rejection in an *ex parte* reexamination proceeding, or after an action closing prosecution in an *inter partes* reexamination proceeding. Accordingly, relief in the form of a continuation of the reexamination prosecution (after a final Office action) was made available by the Office via a 37 CFR 1.182 petition, in appropriate circumstances. This petition will be referred to herein as "the § 1.182 petition."

The § 1.182 petition must further the prosecution of the reexamination proceeding, rather than delay it, and must provide a submission toward that end. This is critical in the reexamination setting, where 35 U.S.C. 305 (for *ex parte* reexamination) and 35 U.S.C. 314 (for *inter partes* reexamination) mandate that reexamination proceedings must be conducted "with special dispatch within the Office." Accordingly, the patent owner must make a *bona fide* effort, in the submission accompanying the § 1.182 petition, or already of record, to define the issues for appeal, or the issuance of a reexamination proceeding. Stated another way, the § 1.182 petition practice includes a requirement that the filing of the § 1.182 petition be accompanied by a submission that provides a *bona fide* effort to advance the prosecution toward appeal, or toward the issuance of a reexamination certificate.

In this instance, the patent owner believed prior to the final rejection that the claim language, as interpreted in view of the specification, was adequate to overcome the rejection and that an explanation to the Office of the claim interpretation would be a persuasive response. After the final rejection, patent owner realized that claim amendments would be required to overcome the rejection. In particular, in the amendment after the final Office action, the patent owner asserted that the amendments were not made previously, because the patent owner believed that the claim terms should be limited to the definitions set forth in the specification, which is asserted to be consistent with the claim construction followed in a concurrent (now closed) litigation, and thus required no amendment. Based on the facts and circumstances of the present situation, it is found that petitioner patent owner's presentation of an amendment paper amending the claims to support the argued claim interpretation is deemed a bona fide effort to advance the prosecution toward appeal, or toward the issuance of a reexamination certificate. As such, the granting of the present petition is consistent with the requirement of 35 U.S.C. 305 to conduct reexamination proceedings "with special dispatch within the Office."

In view of the above and the fact situation presented by the present record, the petition is granted, and the prosecution in the above-noted reexamination proceeding is hereby continued. Prosecution is reopened for consideration of the November 21, 2007 Amendment. This paper will be entered in the reexamination proceeding, and the proceeding will be forwarded to the examiner for action consistent with this decision. The examiner will consider the November 21, 2007 Amendment After Final and then

issue an Office action treating this paper as a patent owner response received after a first Office action.

CONCLUSION

- 1) The petition under 37 CFR 1.182 is granted.
- 2) The prosecution of the present '7617 *ex parte* reexamination proceeding is <u>continued</u>. <u>No further continuation of the present reexamination proceeding will be</u> <u>granted absent a showing of extraordinary circumstances</u>.
- 3) The closing of prosecution rendered via the September 21, 2007 final Office action is <u>withdrawn</u>, and prosecution of the proceeding is <u>reopened</u>.
- 4) The November 21, 2007 response will be <u>entered</u>³ by the Central Reexamination Unit, and will then be <u>considered</u> by the examiner. These papers will be treated as a response by patent owner received **after** a first Office action.
- 5) Jurisdiction over the reexamination proceeding is being forwarded to the Central Reexamination Unit for further handling and examination not inconsistent with this decision.
- 6) Telephone inquiries related to this decision should be directed to Caroline D. Dennison, Legal Advisor, at (571) 272-7729.

Kenneth M. Schor Senior Legal Advisor Office of Patent Legal Administration

January 11, 2008 C:\Kiva\Kenpet6\RCR\ 7617_RCR-grant-amdt-to-go-w-claim construction.doc

³ This decision takes no position on the propriety of the amendment, or whether it introduces new matter. Any issues raised by the amendment will be addressed by the examiner in the next Office action.

TOT OT COMPANY		· · · ·	UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 22: www.uspto.gov	Trademark Office OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,617	07/06/2005	5029183	2319.065REX0	7501
26111 7	03/07/2008		EXAM	INER
-	ESSLER, GOLDSTEIN & DRK AVENUE, N.W.	EFOX P.L.L.C.	L <u></u>	<u></u>
	N, DC 20005		ART UNIT	PAPER NUMBER

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



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspro.gov

MAR 0 7 2008

MAILED

CENTRAL REEXAMINATION UNIT

MacPherson Kwok Chen & Heidi LLP

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

1762 Technology Dr., Suite 226

San Jose, CA 95110

Edward C. Kwok

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/007,617.

PATENT NO. <u>5029183</u>.

ART UNIT <u>3992</u>.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

	Control No.	Patent Under Reexamination				
Notice of Intent to Issue	90/007,617	5029183				
Ex Parte Reexamination Certificate	Examiner	Art Unit				
	Roland G. Foster	3992				
The MAILING DATE of this communication appears o	The MAILING DATE of this communication appears on the cover sheet with the correspondence address					
 1. Prosecution on the merits is (or remains) closed in this <i>ex parte</i> reexamination proceeding. This proceeding is subject to reopening at the initiative of the Office or upon petition. <i>Cf.</i> 37 CFR 1.313(a). A Certificate will be issued in view of (a) Patent owner's communication(s) filed: <u>11/30/07 & 12/19/07</u>. (b) Patent owner's late response filed: (c) Patent owner's failure to file an appropriate response to the Office action mailed: (d) Patent owner's failure to timely file an Appeal Brief (37 CFR 41.31). (e) Other: <i>Petition Decision mailed</i> 1/15/08. Status of <i>Ex Parte</i> Reexamination: (f) Change in the Specification: (g) Change in the Drawing(s): Yes ⊠ No (h) Status of the Claim(s): (i) Patent claim(s) confirmed: (j) Patent claim(s) confirmed: (k) Newly presented claim(s) patentable: <u>85-89</u>. (5) Newly presented cancelled claims: (6) Patent claim(s) currently disclaimed: 						
(7) Patent claim(s) not subject to reexamination	n:					
2. X Note the attached statement of reasons for patentabil necessary by patent owner regarding reasons for pate to avoid processing delays. Such submission(s) shoul Patentability and/or Confirmation."	entability and/or confirmation	n must be submitted promptly				
3. D Note attached NOTICE OF REFERENCES CITED (P	TO-892).					
4. Note attached LIST OF REFERENCES CITED (PTO/	SB/08 or PTO/SB/08 sub	stitute.).				
5. The drawing correction request filed on is:	approved 🗌 disapprove	ed.				
 6. Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the certified copies have been received. not been received. been filed in Application No been filed in reexamination Control No been received by the International Bureau in PCT Application No. 						
* Certified copies not received:						
7. Note attached Examiner's Amendment.						
8. D Note attached Interview Summary (PTO-474).						
9. 🗌 Other:						
cc: Requester (if third party requester)						

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NOTICE OF INTENT TO ISSUE EX PARTE REEXAMINATION CERTIFICATE Entry of the After Final Amendment

On November 21, 2007, the Patent Owner submitted an after final amendment, stating for example, that the "Patent Owner did not believe (and continues to maintain) that the above claim amendments were not required." See page 11 of the amendment.

Consideration of amendments submitted after final rejection and prior to, or with, the appeal will be governed by the strict standards of code of federal regulations, specifically 37 CFR 1.116. MPEP § 2272. 37 CFR 1.116(b), in turn, states in part "[a]n amendment touching the merits of the application or patent under reexamination may be admitted upon a showing of good and sufficient reasons why the amendment is necessary and was not earlier presented."

On December 10, 2007, an advisory action was mailed indicating that the amendments to the claims would not be entered because they were directed to the merits of the claims and because the patent owner failed to make a showing of good and sufficient why the amendment was necessary and not earlier presented. For example, and as noted above, the Patent Owner admitted that the proposed after final amendment was "not required" (i.e., not necessary), which is contrary to the legal requirements of 37 CFR 1.116(b).

On January 15, 2008 however, a petition decision was issued (in response to a request filed December 19, 2007 under 37 CFR 1.182) directing the examiner to enter the November 21,

2007 amendment, where the decision was based on patent owner's "*bona fide* effort to advance the prosecution" and as consistent with the special dispatch requirements of 35 U.S.C. 305.

In response to the petition decision, the examiner must now further consider the issues presented in the November 21, 2007. As a result, the examiner finds claims 1-89 patentable for the reasons below.

Patentable Claims

Claims 1-89 of U.S. Patent No. 5,029,183 are patentable.

Reasons for Patentability

The November 21, 2007 amendment, which the examiner has been directed to enter as discussed above, adds new claims 85-89 that incorporate subject matter from various dependent claims (see page 9 of said amendment) that were previously confirmed on pages 16-19 of the non-final Office action, mailed February 9, 2007, and all corresponding intervening claims, into new independent claims. Therefore, see pages 16-19 of said non-final Office action for further details regarding the examiner's statement of reasons for patentability regarding new claims 85-89.

The November 21, 2007 amendment also amends the independent claims to explicitly include special definitions of the terms "base station" and "second station" that the patent owner previously argued were required when interpreting those terms. For example, the base station

cannot initiate data communications with a remote terminal unit in a power save mode of operation so the remote terminal unit can minimize power consumption. See amended claim 1.

Throughout the prosecution history of the reexamination beginning with the first nonfinal Office action mailed February 14, 2006 and proceeding up until the mandated entry of the November 21, 2007 amendment, the prior art of record in the subject reexamination proceeding was identified and applied to the claims based upon a broader interpretation of the terms "base station" and "second station" than the special definitions now recited in the entered amendment. For example, the closest prior art of record, U.S. Patent No. 4,771,448 ("Koohgoli"), as applied in the final Office action mailed September 21, 2007, fails to disclose the now explicitly claimed feature where a remote terminal unit operates in a "power save mode of operation" in which said base station cannot initiate data communications with said one of said plurality of remote terminal units. See pages 12-14 of the November 21, 2007 amendment for additional details regarding how Koohgoli fails to teach this claimed feature.

Regarding obvious modifications to the Koohgoli base reference, the remaining prior art of record fails to teach or fairly suggest substantially modifying Koohgoli in order to render obvious said limitations now explicitly claimed in the entered amendment. For example, Binder et al. "ALOHA Packet Broadcasting: A Retrospect" AFIPS Notational Computer Conference Proceedings Volume 44 (May 19-22, 1975), pages 203-215, (hereinafter "Binder"), attached as Exhibit "B" to the request for reexamination, filed on July 6, 2005, was identified in said request as teaching that the base station cannot initiate communication with the remote terminal and

suggesting that the terminal may operate in a power save mode of operation. See pages 10 and 13 of said request. Actually however, Binder teaches both a random access channel and a

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<u>broadcast channel</u>, where the <u>base station initiates contact with the remote terminal</u> via the broadcast channel. <u>Id</u>. 203. Furthermore, the power saving mode operation taught in Binder refers to conserving transmitter of the remote unit (i.e., transmission from the remote unit to the base station). In contrast, the claims now recite a power save mode of operation in which the base station does not initiate data communications with the remote terminal unit (i.e., <u>reception</u> at the remote unit of a signal <u>from</u> the base station).

As discussed above, Binder was incorrectly relied upon in the request to teach a base station that does not initiate communications with the remote terminal. The remaining prior art identified in the request was not relied upon to teach this feature, and indeed fails to do so. Furthermore, the remaining prior art identified in the request fails to teach additional significant claim limitations directed to the first and second window. Thus, the remaining prior art identified in the request fails to remedy the deficiencies of the Koohgoli and Binder prior art references (as applied to the claims) discussed above, and indeed, is cumulative to Koohgoli and Binder. For example, the Fralick and Kleinrock systems merely teach a standard ALOHA system. See, for example, Kleinrock (pp. 1401-1403) and Fralick (pp. 255-257). The ALOHA system described by these references does not disclose that the first time period is selected by the mobile unit (remote terminal unit), nor that the second time period (the response) is the same for at least some of said units. The requester argued in the request that the second limitation is inherent in the ALOHA system, asserting that the patent owner stated as such in arguments

Art Unit: 3992 supporting a prior amendment to the claims, specifically that the "claims recite that the fixed

time or the time window is the same for all remote units, which would not be possible with the system of the reference where time slots are dictated to separate in time the transmission from remote units." See footnote 7 on page 14 of the request. However, such a disclosure merely establishes that the patent owner considered that feature absent from the time slotted art at issue, not that an unslotted ALOHA system inherently disclosed such a feature. Thus, the Fralick and Kleinrock systems merely teach a standard ALOHA system cumulative to prior art already of record in this reexamination proceeding.

The Carlman reference identified in the request discloses a communication system for a restaurant wherein a mobile station may send communications to a base station at an arbitrary set time and receive communications in response. Carlman does not teach reception of signals during a fixed time window being the same for a least some of the units, or that the first time period is selected by the mobile station.

The Oda and Akahori references cited in the request were described in said request as being merely representative of the technology of Carlman (see page 11 of the request). Thus, said references, like Carlman, are merely cumulative to the record already established in the prosecution of the instant patent.

The above reasons for patentability and/or confirmation are based on the claims as presently set forth in their totality. The above reasons for patentability and/or confirmation

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should not be interpreted as indicating that amended claims broadly reciting certain limitations discussed in said reasons would be allowable.

Any comments considered necessary by the Patent Owner regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the Patent Owner should be labeled: "Comments on Statement of Reasons for Patentability and/or confirmation" and will be placed in the reexamination file.

Conclusion

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving US Patent No. 5,029,183 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

All correspondence relating to this ex parte reexamination proceeding should be directed

as follows:

By U.S. Postal Service Mail to:

Mail Stop "Ex Parte Reexam" ATTN: Central Reexamination Unit Commissioner for Patents P. O. Box 1450 Alexandria VA 22313-1450

By **FAX** to:

(571) 273-9900 Central Reexamination Unit

By hand to:

Customer Service Window Central Reexamination Unit Randolph Building, Lobby Level 401 Dulany Street Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

Reexamination Legal Advisor or Examiner, or as to the status of this proceeding, should be

directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

Róland G. Foster Central Reexamination Unit, Primary Examiner Electrical Art Unit 3992 (571) 272-7538

Conferees

MARK J. REINHART CRU SPE-AU 3992

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination
	90/007,617	5029183
	Examiner	Art Unit
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Reexamination	Application/Control No. 90/007,617	Applicant(s)/Patent Under Reexamination 5029183	
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CONFIRMATION NO. 7501

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Symbol Teo Edward C. Edward C. ** CONTINUING This applica ** FOREIGN APP	RULE PPLICANTS 5029183, Residence Not Provided; Symbol Technologies Inc.(Owner), Houston, TX; Edward C. Kwok(3rd. Pty. Req.), San Jose, CA; Edward C. Kwok, San Jose, CA; DNTINUING DATA **********************************										
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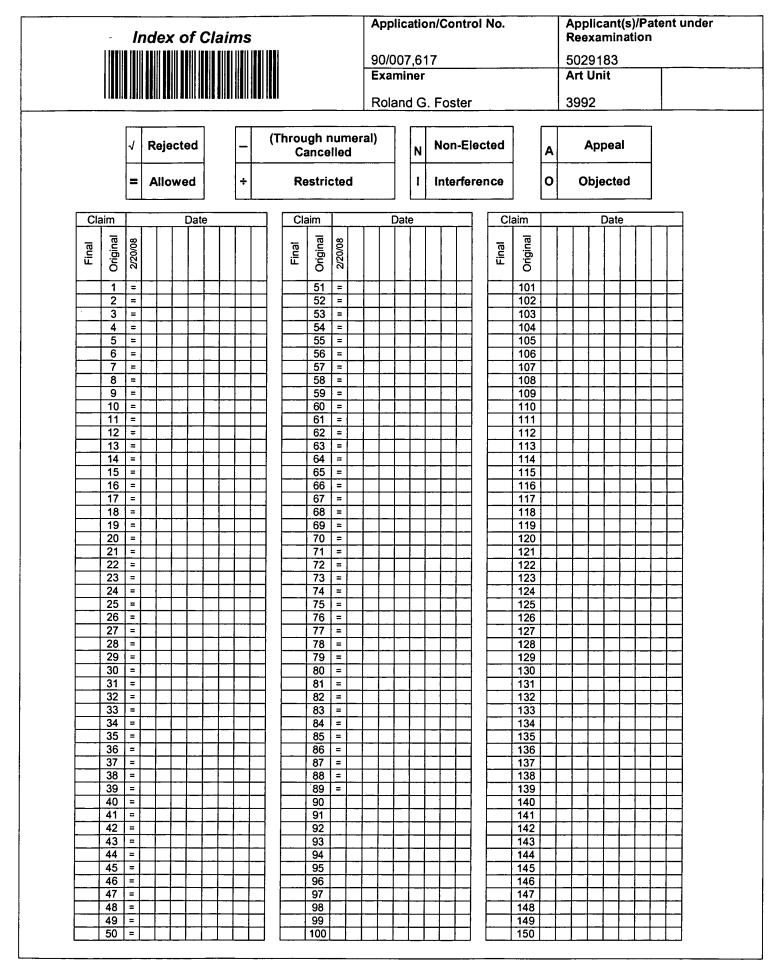
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Application/Control No.	Applicant(s)/Patent under Reexamination
90/007,617	5029183
Examiner	Art Unit
Roland G. Foster	3992

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		Applicant	LaRoy TYMES	
		Art Unit	3992	
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	AB	4,720,710	19 Jan. 1988	Akahori et al.				
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Substitute for	: form 1449/P	то		Complete if Known		
INFORM				Application Number	90/007,617	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	July 6, 2005	
				First Named Inventor	L. Tymes	
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Examine	Cite	NON PATENT LITERATURE DOCUMENTS		
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R¢.ī	NPL21	Memorandum Order, Symbol Technologies, Inc. v. Proxim Incorporated, CA No. 01-801-SLR, July 30, 2003, pp. 1-7.		
	NPL22	Trial Transcript, Volume E, Symbol Technologies, Inc. V. Proxim Incorporated, C.A. No. 01-801-SLR, September 12, 2003, pp. 1055, 1056, 1092, 1208.		
	NPL23	English Abstract of EP0075310A: Circuit Arrangement for Telecommunication Exchanges, Especially Telephone Exchanges, with Devices for Securing the Transmission of Coded Signals.		
	NPL24	J.S.J. DAKA, et al., "A High Performance Broadcast File Transfer Protocol", SIGCOMM '88 Symposium, Communications Architectures & Protocols, 1988, pp. 274-281.		
	NPL25	S. CHOW, et al., "A Spread Spectrum Modem for Reliable Data Transmission in the High Frequency Band", Second Conference on HF Communication Systems and Techniques, February 15-17, 1982, pp. 125-130.		
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RCT	NPLII	Robert E. KAHN, et al., "Advances in Packet Radio Technology", Proceeding of the IEEE, Volume 66, Number 11, pp. 1468-1496.					
	NPL12	R. BINDER, et al., "ALOHA Packet Broadcasting - A Retrospect", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19 - 22, 1975, pp. 203-215.					
	NPL13	Norman ABRAMSON, "The ALOHA SYSTEM - Another Alternative for Computer Communications", AFIPS Conference Proceedings, Vol. 37, 1970 Fall Joint Computer Conference, Nov. 17 - 19, 1970, pp. 281-285.					
	NPL14	Richard BINDER, et al., "The Alohanet Menehune - Version 11", Sponsored by Advanced Research Projects Agency, ARPA Order No. 1956, September 1974, pp 1-55.					
	NPL15	Andrew S. TANENBAUM "Computer Networks" 2 nd Ed., Ch. 3, 1988, pp., 182- 193.					
	NPL16	"Digital Terminals for Packet Broadcasting", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 254-261.					
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	NPL19	Leonard KLEINROCK, et al., "Random Access Techniques for Data Transmission Over Packet-Switched Radio Channels", AFIPS Conference Proceedings, 1975 National Computer Conference, May 19-22, 1975, pp. 187- 201.					
	NPL20	The Vectran VR1100 System: Your Link to Productivity, 11 pages.					
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¹²EXAMINER: Initial if reference densidered, whether or not classion is in conformance with MPEP 609. Draw line through classion II not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique classion designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. ¹Applicant's unique classion of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an epplication. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, Including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/S8/088 (07-05)

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Substitute for form	1 1449/P1	ю		Complete if Known		
INDODA				Application Number	90/007,617	
INFORMA'	ΓΙΟΝ	DISC	CLOSURE	Filing Date	July 6, 2005	
STATEME	NT BY	Y AP	PLICANT	First Named Inventor	L. Tymes	
(Use	аз талу	sheers a	is necessary)	Art Unit	2616	
			Examiner Name	Hanh Nguyen		
Sheet	1	of	3	Attorney Docket Number	2319.065REX0	

Energia		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.'	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published					
RLT.	NPL1	Leonard KLEINROCK, et al., "Packet Switching in Radio Channels: Part I - Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics", IEEE Transactions on Communications, Vol. Com-23., No. 12, December 1975, pp. 1400-1416.					
	NPL2	B.S. TSYBAKOV, et al., "Packet Transmission in Radio Networks", Reprinted with permission from Problemy Peredacti Informaisii, vol. 21, no. 1, pp. 80-101, Jan March 1985, pp. 330-341.					
	NPL3	Norman ABRAMSON, "The Throughput of Packet Broadcasting Channels", IEEE Transactions on Communication, January 1977, pp. 117-128.					
	NPL4	J.M. WOZENCRAFT, et al., "Coding for Two-Way Channels", Research Laboratory of Electronics and Lincoln Laboratory, Massachusetts Institute of Technology, pp. 11-25.					
	NPL5	Simon S. LAM, et al., "Packet Switching in a Multiaccess Broadcast Channel: Dynamic Control Procedures", Transactions on Communications, Vol. Com - 23, No. 9, September 1975, pp. 891-904.					
	NPL6	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.					
	NPL7	J.J. SPILKER, Jr. Ph.D., "Digital Communications by Satellite", 1977, pp. 449- 450, 452-453 and 468.					
	NPL8	John M. WOZENCRAFT, et al., "Coding For Two-Way Channels", Technical Report 383, January 3, 1961, pp. 1-16.					
	NPL9	Lawrence G. ROBERTS, "Extensions of Packet Communication Technology to a Hand Held Personal Terminal", Spring Joint Computer Conference, 1972, pp. 295-298.					
\checkmark	NPL10	Mario TOKORO, et al., "Acknowledging Ethernet", pp. 1-6.					
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"EXAMINER: Initial II reference considered, whether or not cligation is in conformance with MPEP 609. Draw line through cligaton if not in conformance and not considered. Include copy of this form with next communication to explorent. "Applicant's unique cligation designation number (optional)." Applicant is to place a check mark here if English language Transistion is attached. USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO	Complete if Known		
	Application Number	90/007,617	
INFORMATION DISCLOSURE	Filing Date	July 6, 2005	
STATEMENT BY APPLICANT	First Named Inventor	L. Tymes	
(Use as many sheets as necessary)	Art Unit	2616	
	Examiner Name	Hanh Nguyen	
Sheet I of I	Attorney Docket Number	2319.065REX0	

Examiner	Cite	Document Number	U.S. PATENT D	Name of Patentee or		
Initials" No."		Number-Kind Code ^{2 (J/Kana)}	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passage	
12.1.1	USI	3,251,034	05/10/1966	GOODE, et al.	or Relevant Figures Appea	
	US2	3,959,589	05/25/1976	von ROESGEN, et al.		
_	US3	4,022,973	05/10/1977	STACKHOUSE, et al.		
	US4	4,197,500	04/08/1980	KLEIN, et al.		
	US5	4,418,277	11/29/1983	TREMMEL, et al.	+	
	US6	4,460,120	07/17/1984	SHEPARD, et al.	- <u> </u>	
_	US7	4,477,809	10/16/1984	BOSE		
	US8	4,661,902	04/28/1987	HOCHSPRUNG, et al.	1	
	US9	4,673,805	06/16/1987	SHEPARD, et al.	1	
	<u>US10</u>	4,704,517	11/03/1987	CAMPISI, et al.		
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-++	US20	4,995,053	02/19/1991	SIMPSON, et al.		
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	US22	5,010,241	04/23/1991	BUTTERWORTH		
	US23	5,046,066	09/03/1991	MESSENGER	<u> </u>	
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ICC.F	FPI	EP 0075310	03/30/1983	Ulrich HEYLAND, et al.	Appear	
	FP2	EP 0 131 663	01/23/1985	Takashi OKADA, et al.		
4	FP3	WO 88/04496	06/16/1988	Allyson REED, et al.		<u> </u>
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Substitute for form	1449/PT	o		Complete if Known		
INFORMATION		_		Application Number	90/007,617	
INFORMAT	LION	DISC	CLOSURE	Filing Date	July 6, 2005	
STATEMEN	NT BY	Y AP	PLICANT	First Named Inventor	L. Tymes	
(Use	as many	sheets a	is necessary)	Art Unit	2616	
				Examiner Name	Hanh Nguyen	
Sheet	1	of	1	Attorney Docket Number	2319.065REX0	

		NON PATENT LITERATURE DOCUMENTS	_				
Examiner Cite Initials* No. ¹		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published					
RF	NPL26	Michael J. FERGUSON, "On the Control, Stability, and Waiting Time in a Slotted ALOHA Random-Access System", IEEE Transactions on Communication, November 1975, pp. 1300, 1308 and 1310.					
	NPL27	Certified Translation of German Patent No. DE 3304451, 21 pages (October 18, 1984 - Date of Publication of Patent).					
	NPL28	English Language Abstract of Japanese Patent Publication No. JP 53-108310, data supplied by espacenet, 1 page (September 21, 1978 - Date of Publication).					
	NPL29	English Language Abstract of Japanese Patent Publication No. JP 55-136733, data supplied by espacenet, 1 page (October 24, 1980 - Date of Publication).					
	NPL30	English Language Abstract of Japanese Patent Publication No. JP 61-071738, data supplied by espacenet, 1 page (April 12, 1986 - Date of Publication).	<u> </u>				
	NPL31	English Language Abstract of Japanese Patent Publication No. JP 61-270930, data supplied by espacenet, 1 page (December 1, 1986 - Date of Publication).					
V	NPL32	English Language Abstract of Japanese Patent Publication No. JP 63-198438, data supplied by espacenet, 1 page (August 17, 1988 - Date of Publication).					
	NPL33						
	NPL34						

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Substitute for form 1449/PTO	Complete	if Known	
	Application Number	90/007,617	
INFORMATION DISCLOSURE	Filing Date	July 6, 2005	
STATEMENT BY APPLICANT	First Named Inventor	L. Tymes	
(Use as many sheets as necessary)	Art Unit	2616	
01	Examiner Name	Hanh Nguyen	
Sheet 1 of 1	Attorney Docket Number	2319.065REX0	

Examiner	Cite	Document Number	U.S. PATENT De Publication Date	Name of Patentee or	
Initials [®]	No.	Number-Kind Code ^{1 (If Karon)}	MM-DD-YYYY	Applicant of Cited Document	Pages, Columns, Lines,
RF				of the ched bocument	Where Relevant Passages or Relevant Figures Appear
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Examiner	Cite	Foreign Patent Document	Publication Date			
Initials*	No.'	Country Code ¹ Number ⁴ Kind Code ⁴ (If known)	MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures	
RF	FP4	DE 3304451	10/1984	KAPPELLER	Appear	Т°
	FP5	EP 0 131 662	01/23/1985	RODMAN		X
	FP6	JP 53-108310	09/21/1978	HORUMESU, et al.	Dentil	
_	FP7	JP 55-136733		HARUO, et al.	Partial Tra Abstract Tr	nslati
	FP8	JP 61-071738	04/12/1986	KENJI, et al.	ADSCIACE II	ansiat
	FP9	JP 61-270930	12/01/1986	HIROSHI		
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	/Roland Foster/	Date	
Signature	/Noranu Foster/		02/03/2007
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SECOND SUPPLEMENTAL		Application Number	90/007,617					
INFORMATION DISCLOSURE		Filing Date	July 6, 2005					
STATEMENT BY APPLICANT (Use as many sheets as necessary)		First Named Inventor	L. Tymes					
		Art Unit	3992					
				Examiner Name	Roland G. Foster			
Sheet	1	of	1	Attorney Docket Number	2319.065REX0			

Examiner	0.	NON PATENT LITERATURE DOCUMENTS	
Initials*	Cite No. ¹	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T ²
RF	NPL33	LIN, Shu and COSTELLO, Daniel J., Jr., "ERROR CONTROL CODING: Fundamentals and Applications," Prentice-Hall, Inc., Englewoods Cliffs, NJ, 1983, pp. 458-465.	
	NPL34		
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Signature	/Roland Foster/	Date	
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SECOND SUPPLEMENTAL	Application Number	90/007,617	
INFORMATION DISCLOSURE	Filing Date	July 6, 2005	
	First Named Inventor	L. Tymes	
STATEMENT BY APPLICANT	Art Unit	3992	
(Use as many sheets as necessary)	Examiner Name	Roland G. Foster	
Sheet 1 of 1	Attorney Docket Number	2319.065REX0	

Examiner	Cite	1	U.S. PATENT DO		
Initials [®]	No.'	Document Number Number-Kind Code ² ((fKaons)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appea
RF	US25	4,344,171	08-10-1982	LIN, et al.	of Kelevalle 1 gares Appea
	US26	4,654,654	03-31-1987	BUTLER, et al.	
	US27	4,679,244	07-07-1987	KAWASAKI, et al.	
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	US29	4,882,770	11-21-1989	MIYAHIRA, et al.	
-	U\$30	4,940,963	07-10-1990	GUTMAN, et al.	
_¥	US31	4,979,168	12-18-1990	COURTOIS, et al.	
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Sheet	1	of	1

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U.S. Department of Commerce, Patent and Trademark Office									
						M-16056-RE US Unassigned			
INFORM	INFORMATION DISCLOSURE STATEMENT BY APPLICANT						Applicant(s)		
		(Use several sheets	if necessary)		LaRoy Tymes				
					Re-Exa	Re-Exam Date: Group 266			
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	-		U.S. P	atent Documents				•	
*Examiner Initial (Document Number	Date	Name	c	Class	Subclass	Filing Date If Appropriate	
th.	AA	4,479,261	23 Oct. 1984	Oda et al.					
- AN	AB	4,720,710	19 Jan. 1988	Akahori et al.					
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HN	AM	Binder et al. "ALOHA Packet Broadcasting: A Retrospect" AFIPS National Computer Conference Proceedings Volume 44 (May 19-22, 1975), pages 203-215.							
AN	AN	Fralick et al. "Digital Terminals for Packet Broadcasting" AFIPS National Computer Conference (NCC) Proceedings Volume 44 (May 19-22, 1975), pages 253-262.							
HN	AO	Kleinrock et al. "Packet Switching in Radio Channels: Part I – Carrier Sense Multiple-Access Modes and Their Throughput-Delay Characteristics," IEEE Transactions on Communications, Volume 23, No. 12, December 1975, pages 1400-1416.							
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Examiner	an	102.	Date Considered	1/261	06				
*EXAMINER: In that if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.									

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Notice of Peterences Cited	Application/Control No. 90/007,617	Applicant(s)/Patent Under Reexamination 5029183	
Notice of References Cited	Examiner		
	Hanh Nguyen	2668	Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
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(12) EX PARTE REEXAMINATION CERTIFICATE (6452nd)

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(54) PACKET DATA COMMUNICATION NETWORK

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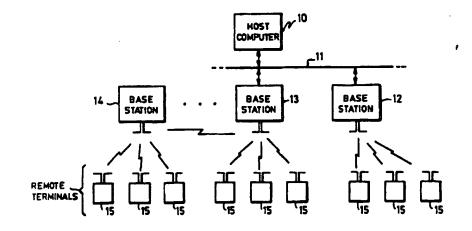
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(57) ABSTRACT

A packet data transmission system is used to link a number of remote hand-held data-gathering units such as bar code readers to a central computer which maintains a database management system. Data packets are sent from the remote units by an RF link to intermediate base stations, then sent by the base stations to the central computer by a serial link. Direct sequence spread spectrum modulation is used for the RF link. The remote hand-held units initiate an exhange using RF transmission to and from the base stations, receiving only during a rigid time window following a transmission from the remote unit. The base stations cannot initiate communication to the remote units, but instead send data to the remote units only as part of the exchange.



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EX PARTE REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the 10 patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT: 15

The patentability of claims 70-84 is confirmed.

Claims 1, 21, 40, 50 and 60 are determined to be patentable as amended. 20

Claims 2–20, 22–39, 41–49, 51–59 and 61–69, dependent on an amended claim, are determined to be patentable.

New claims 85-89 are added and determined to be patentable.

1. A method of transmitting data packets from one of a plurality of remote terminal units *in a power save mode of operation* to a base station, comprising the steps of: 30

- (a) transmitting a data packet from said one unit to said base station during a first time period selected by the unit;
- (b) receiving at said one unit from said base station an acknowledge signal during a second time period occurring only a fixed time delay after said first time period, said second time period being the same for at least some of said units,
- wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.

21. A system for transmitting data packets from one of a plurality of first stations to a second station wherein said plurality of first stations have a power save mode of opera-⁴⁵ tion in which said second station cannot initiate data communications with said plurality of first stations, comprising:

- (a) a transmitter in said one first station for transmitting a data packet from said one first station to the second station during a first time period selected by said one first station;
- (b) a receiver in said one first station for receiving an acknowledge signal from the second station during a second time period occurring only in a time window 55 referenced to said first time period by a fixed delay, said fixed delay being the same for all said plurality of first stations,
- wherein said transmitting and receiving are performed during said power save mode of operation. 60

40. A method of data transmission between a plurality of terminals *in a power save mode of operation* and a base station, comprising the steps of:

(a) transmitting a data packet from one of said terminals to said base station at a time selected by said one of said 65 terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; and

- [(c)] (b) receiving said acknowledgement at said one terminal during said predetermined time window,
- wherein steps (a) and (b) are performed during said power save mode of operation in which said base station cannot initiate data communications with said one of said plurality of remote terminal units.
- 50. A data communication system comprising:
- (a) a host computer including a data communication input/output port;
- (b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;
- (c) a plurality of remote units having a power save mode of operation, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window during said power save mode of operation, each of the remote units having:
 - (i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;
 - (ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said fixed time window,
- wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.

60. A data communication system comprising:

- (a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;
- (b) a plurality of remote units having a power save mode of operation, each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations during said power save mode of operation, each of the remote units having:
 - (i) a data source, a memory for storing data from the data source, and a processor for transferring data to and from the memory;
 - (ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a

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base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal 5 packet,

- wherein said plurality of base stations cannot initiate data communications with said plurality of remote terminal units during said power save mode of operation.
- 85. A method of data transmission between a plurality of $_{10}$ terminals and a base station, comprising the steps of:
 - forming a data packet in a memory by expanding a multibyte packet to create an expanded packet then producing in said memory an exclusive-OR of said expanded packet and a fixed pseudorandom sequence of bits;
 - ¹⁵ transmitting said data packet from one of said terminals to said base station at a time selected by said one of said terminals, the data packet including identification of said one of the terminals; transmitting an acknowledgement from the base station to said one of said terminals in a predetermined time window, at least part of said predetermined time window being the same for all of said terminals, said acknowledgement including identification of said terminal; and
 - receiving said acknowledgement at said one terminal during said predetermined time window,
 - wherein said transmitting is by wireless RF,
 - wherein said RF is modulated by the spread spectrum technique, and
 - wherein said spread spectrum technique employs a 30 sequence of frequency shifts between two frequencies.

86. A method according to claim 85 wherein said multibyte packet includes the results of reading a bar code symbol.

87. A data communication system comprising:

- (a) a host computer including a data communication input/output port;
- (b) a plurality of base stations; each base station having a data communication input/output port; said data communication input/output ports of the host computer and 40 at least one of said base stations being connected by a data communications link; each of the base stations having an RF transmitter/receiver responsive to received encoded RF signal packets and transmitting RF acknowledge signal packets; each of the base stations producing digital data corresponding to said received encoded RF signal packets, and storing said digital data for transferring to said host computer via said data communication input/output port and said data communications link;
- (c) a plurality of remote units, each remote unit located for sending said encoded RF signal packets to one of said base stations at a time selected by the remote unit and receiving said RF acknowledge signal packets from one of said base stations in a fixed time window, each of ⁵⁵ the remote units having:
 - (i) a memory for storing data from a local data source, and a processor for transferring data to and from the memory;
 - (ii) an RF transmitter/receiver having a modulator for modulating an outgoing carrier with data from said memory to produce said encoded RF signal packets, and a detector responsive to RF signals received by said RF transmitter/receiver to detect RF acknowledge signal packets from the base station in said ⁶⁵ fixed time window;

- wherein each one of said remote units is identified by a unique identifying code contained in said encoded RF signals transmitted by the remote unit, and wherein said base stations are responsive to said unique identifying code to allow only one of the base stations to send said RF acknowledge signals to each separate remote unit.
- wherein each one of said base stations in responsive to all of the encoded RF signals from all of the remote units within range, and detects the number of errors occurring in reception from each one of the remote units in said encoded RF signals, and
- wherein a representation of said number of errors is transmitted to other of said base stations via said communication link to specify the unique codes of remote units each base station is to be responsive to by sending said RF acknowledge signals, said information being derived from said respresentation of number of errors.

88. A system according to claim 87 wherein at least some of said remote units are hand-held bar code readers.

89. A data communication system comprising:

- (a) at least one base station; each base station having an RF transmitter/receiver responsive to encoded RF signal packets and producing RF acknowledge packets; each base station decoding said encoded RF signal packets received by said RF transmitter/receiver and producing digital data corresponding thereto;
- (b) a plurality of remote units each located for sending said encoded RF signal packets to at least one of said base stations and receiving said RF acknowledge packets from one of said base stations, each of the remote units having:
 - (i) a data source, a memory for storing data from the source, and a processor for transferring data to and from the memory;
 - (ii) an RF transmitter/receiver producing said encoded RF signal packets containing data from said memory and detecting said RF acknowledge packets from a base station to load data from detected packets to said memory, wherein said RF transmitter/receiver in said remote unit is activated for detecting an RF acknowledge packet only during a fixed time window following transmission of an encoded RF signal packet,
- wherein said RF transmitter/receiver in said remote unit is activated by said processor for detecting said RF acknowledge packet only during a fixed time window following transmission of said encoded RF signal packet,
- wherein said RF transmitter/receiver in a remote unit sends said RF signal packet only after receiving to detect any other RF signal from another remote unit which may be present,
- wherein said base station decodes said RF signal packet while said RF signal packet is being received, and said remote unit decodes said RF acknowledge signal after said RF acknowledge signal has been received by accessing said memory via said processor, and
- wherein said base station decodes said RF signal packet by loading detected data corresponding to the signal serially into a register and decoding bits of said register in parallel.

* * * *