network (Figure 3a element 301, a cellular environment for a communication system), comprising a plurality of base stations (figure 3a, element 304), each of plurality of base stations capable of bidirectional time division duplex (TDD) communication (column 5 lines 62-65, user stations 302 and base stations 304 may communicate using time division duplex communication techniques) with wireless access devices (figure 3a element 302) disposed at a plurality of subscriber premises in an associated cell site (figure 3a, cells associated with user stations 302) of wireless access network, a transceiver (column 16 lines 51-52, a transmitter 807, a receiver 809 and fig 8A) associated with a first of plurality of base stations comprising:

transmit path circuitry (column 16 lines 51-52, a transmitter 807 and fig 8A) associated with a beam forming network capable of transmitting directed scanning beam signals (figure 3a and column 22 line 61, directional antenna) each directed to substantially only wireless access devices within a different one of a plurality of sectors (figure 3a, cells associated with user stations 302) in a sector of a cell site associated with first base station, wherein transmit path circuitry transmits at a start of a TDD frame a broadcast beam signal (column 20 lines 25-33, In each transmit time slot 574, rather than sending a message directed to a single user station 302, the base station 304 sends an interleaved message 578 containing a sub-message 589, for each of the user stations 302 (or a sub-message 589 for general polling or other functions if the receive time slot is unoccupied)) to wireless access devices within more than one of sectors (figure 3a, cells associated with user stations 302) the broadcast beam signal comprising a start of frame field (figure 11a, element 1102, preamble) capable of

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synchronizing (column 5 lines 1-5, The base station may precede their main data transmissions with a preamble, such as, for example, where desired for synchronization of spread spectrum communication signals or for conducting power control) subsequently transmits in a downlink portion (figure 507 element 502) of TDD frame (figure 5b, element 551) first downlink data traffic (figure 507 element 502) to substantially only wireless access devices within one of sectors (figure 3a, cells associated with user stations 302) using one of directed scanning beam signals (figure 3a and column 22 line 61, directional antenna).

In regards to claims 2, 11 and 20 broadcast beam signal further comprising a first beam map (column 10 lines 55-64, a brief header 550) containing scanning beam information (column 10 lines 55-64, indicating whether or not the particular slot pair 510, 511 is available) usable by said wireless access device to detect directed scanning beam signal is anticipated by (column 10 lines 55-64) by the steps of during facilitation of initial communication between a base station 304 and a user station 302, each base transmission during a transmit time slot 510 may have a brief header 550 preceding a data link message 551 indicating whether or not the particular slot pair 510, 511 is available. If a slot pair 510, 511 is available, a user station 302 desiring to establish communication with the base station 304 responds with a brief reply message 562 in the receive time slot 511 of the slot pair 510, 511.

In regards to claims 3, 12 and 21 scanning beam information identifying a downlink time slot in downlink portion (column 10 lines 55-64, by the steps of during facilitation of initial communication between a base station 304 and a user station 302,

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each base transmission during a transmit time slot 510 may have a brief header 550 preceding a data link message 551 indicating whether or not the particular slot pair 510, 511 is available) during which one of directed scanning beam signal transmits downlink data traffic is anticipated by (column 10 lines 55-64) a slot pair 510, 511 if being available, a user station 302 desiring to establish communication with the base station 304 responds with a brief reply message 562 in the receive time slot 511 of the slot pair 510, 511.

In regards to claims 6, 15, 24, receive path circuitry (column 16 lines 51-52, a receiver 809 and Fig 8A) associated with said beam forming network capable of receiving uplink data traffic transmitted by one wireless access device in an uplink portion of said TDD frame (figure 7 element 504, Reception).

In regards to claims 7, 16 and 25 Scott anticipates, first beam map further contains uplink transmission information identifying an uplink time slot (column 8 lines 61-67, receive time slot 511) in uplink portion (figure 7 element 504) during which said at least one wireless access device transmits said uplink data traffic (column 8 lines 61-67) is anticipated by the user station 302 receiving a base transmission from the first transmit time slot 510 is the first to send a responsive user transmission in the first receive time slot 511, the user station 302 receiving the base transmission from the second transmit time slot 510 is the second to send a responsive user transmission in the second receive time slot 511, and so on. In this manner, the base station 304 sends a series of consecutive base transmissions, each directed to a separate user station 302, and receives a series of consecutive user transmissions in matching return order.

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In regards to claims 28 and 29, Scott anticipates transmit path circuitry (column 16 lines 51-52, a transmitter 807 and fig 8A) transmits, in downlink portion (figure 507 element 502) of TDD frame (figure 5b, element 551), second downlink data traffic to substantially only wireless access devices within an other of sectors (column 2 lines 5-10, the base station may transmit to a first user station, await a response, and, after receiving a response from the first user station, transmit to a second user station, and so on, until the base station has communicated with all user stations sequentially over a particular time frame) using an other of directed scanning (figure 3a and column 22 line 61, directional antenna) beam signals (column 20 lines 25-33, In each transmit time slot 574, rather than sending a message directed to a single user station 302, the base station 304 sends an interleaved message 578 containing a sub-message 589, for each of the user stations 302 (or a sub-message 589 for general polling or other functions if the receive time slot is unoccupied))

Claim Rejections - 35 USC § 103

3. 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.

4. Claims 4, 5, 13, 14, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Baum et al. (Performance analysis of an adaptive

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OFDM packet data system; Broadband Communications, 2000. Proceedings. 2000 International Zurich Seminar on 15-17 Feb. 2000 Page(s):237 – 243), hereinafter referred to as Baum.

In regards to claims 4, 5, 13, 14, 22 and 23, Scott teaches using TDD for data communication between base stations and user units as described in the rejections of claims 1, 10 and 19 above.

Scott does not explicitly teach scanning beam information identifies at least one modulation format and one forward error correction code level associated with one of directed scanning beam signal.

Baum in the same field of endeavor teaches (page 238, column 1, second paragraph) before transmission, fragments are FEC encoded with a 64-state rate-compatible punctured convolution (RCPC) code, interleaved, and mapped to a modulation scheme.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Scott's teaching by incorporating the inclusion of modulation scheme as taught by Baum. The motivation is that (as suggested by Baum, page 237, column 2, System Overview, first paragraph) a portion of the downlink interval contains control information that assigns the downlink and uplink resources to a specific combination of subscriber units in the current frame. This provides a true "bandwidth on demand" capability in the system, thus making the system efficient.

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Allowable Subject Matter

5. Claims 8, 9, 17, 18, 26 and 27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments see pages 12-14 of the Remarks section, filed 5/18/2006, with respect to rejections of claims 1-7. 10-16 and 19-25 have been fully considered and are not persuasive.

In regards to claims 1, 10 and 19, the Applicant argues (See page 12 last paragraph and page 13 paragraph 3) that Scott reference does not teach *first downlink data traffic transmitted during a downlink portion of the TDD frame is transmitted to substantially only wireless access devices within one of the cell sectors using one of the directed scanning beam signals* and further argues that *nothing in the cited portion of Scott suggests using a directional antenna to transmit download traffic to substantially only devices within one cell sector*. However, Examiner respectfully disagrees with this assertion. The present claim language is broad and in view of the broadest reasonable interpretation of this language, Scott does in fact disclose the cited limitations. Specifically Scott teaches transmit path circuitry (column 16 lines 51-52, a transmitter 807 and fig 8A) associated with a beam forming network capable of transmitting directed scanning beam signals (figure 3a and column 22 line 61, directional antenna) each directed to substantially only wireless access devices within a different one of a

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plurality of sectors (figure 3a, cells associated with user stations 302) in a sector of a cell site associated with first base station. To further clarify, Scott teaches (column 2 lines 19-27) user stations are often mobile and can move anywhere within the radius of the cell covered by a base station. Scott teaches In FIG. 3A, a communication system 301 for communication among a plurality of user stations 302 includes a plurality of cells 303, each with a base station 304, typically located at the center of the cell 303. Each station (both the base stations 304 and the user stations 302) generally comprises a receiver and a transmitter. The user stations 302 and base stations 304 may communicate using time division duplex or any of the other communication techniques disclosed (column 6 lines 57-65).

In regards to claims 4, 5, 13, 14, 22 and 23 the Applicant argues (see page 13 last paragraph and page 14 first paragraph) that *to establish a prima-facie case of obviousness, three basic criteria must be met: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. Id.* However, in response Examiner respectfully states that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed

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invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art at the time the invention was made. See In re Keller 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Prior art pertinent to the application but not used in office action:

- US 6470057 B1 USPAT Method for timing recovery and compensation in time-division-duplex wireless communications Hui; Liu et al.
- Wireless in-building network architecture and protocols
  Buchholz, D.; Odlyzko, P.; Taylor, M.; White, R.; Communications, 1992. ICC 92, Conference record, SUPERCOMM/ICC '92, Discovering a New World of

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Communications. IEEE International Conference on 14-18 June 1992 Page(s):1025 - 1031 vol.2

- Integrated video and data transmission in the TDD ALOHA-reservation wireless LAN Tasaka, S.; Hayashi, K.; Ishihashi, Y.; Communications, 1995. ICC 95 Seattle, Gateway to Globalization, 1995 IEEE International Conference on Volume 3, 18-22 June 1995 Page(s):1387 - 1393 vol.3.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salman Ahmed whose telephone number is (571)272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

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.

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

Art Unit 2616

SA
05/31/2006

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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Notice of References Cited	Application/Control No. 09/948,059	Applicant(s)/Patent Under Reexamination STRUHSAKER, PAUL F.	
	Examiner Salman Ahmed	Art Unit 2666	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,094,421	07-2000	Scott, Logan	370/280
*	B	US-6,470,057	10-2002	Hui et al.	375/294
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Baum et al. (Performance analysis of an adaptive OFDM packet data system; Broadband Communications, 2000. Proceedings. 2000 International Zurich Seminar on 15-17 Feb. 2000 Page(s):237 – 243)
	V	·Wireless in-building network architecture and protocols Buchholz, D.; Odlyzko, P.; Taylor, M.; White, R.; Communications, 1992. ICC 92, Conference record, SUPERCOMM/ICC '92, Discovering a New World of Communications. IEEE International Conference on 14-1
	W	·Integrated video and data transmission in the TDD ALOHA-reservation wireless LAN Tasaka, S.; Hayashi, K.; Ishihashi, Y.; Communications, 1995. ICC 95 Seattle, Gateway to Globalization, 1995 IEEE International Conference on Volume 3, 18-22 June 1995 Page
	X	

*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.

Index of Claims

Applicati n/Contr I N .	Applicant(s)/Patent under Reexamination
09948059	STRUHSAKER, PAUL F.
Examiner	**Art Unit**
Ahmed, Salman	2616

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE									
Final	Original	5/31/2006									
	1	✓									
	2	✓									
	3	✓									
	4	✓									
	5	✓									
	6	✓									
	7	✓									
	8	O									
	9	O									
	10	✓									
	11	✓									
	12	✓									
	13	✓									
	14	✓									
	15	✓									
	16	✓									
	17	O									
	18	O									
	19	✓									
	20	✓									
	21	✓									
	22	✓									
	23	✓									
	24	✓									
	25	✓									
	26	O									
	27	O									
	28	✓									
	29	✓									

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	09948059	STRUHSAKER, PAUL F.
	Examiner Ahmed, Salman	Art Unit 2616

Notes	Date	Examiner
Updated Search	5/31/2006	SA

U.S. Patent and Trademark Office	Part of Paper No.:

PETITIONER NOKIA
Ex.1012

Searched	Application/Control No.	Applicant(s)/Patent Under Reexamination
	09948059	STRUHSAKER, PAUL F.
	Examiner Ahmed, Salman	Art Unit 2616

Class	SubClass	Date	Examiner
Updated Search	Updated Search	5/31/2006	SA

U.S. Patent and Trademark Office	Part of Paper No.:

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OIPE
OCT 13 2006
PATENT & TRADEMARK OFFICE

DOCKET NO. WEST14-00103 **PATENT**
Customer No. 23990

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Paul F. Struhsaker
Serial No.	:	09/948,059
Filed	:	September 5, 2001
For	:	WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION
Group No.	:	2616
Examiner	:	Salman Ahmed

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

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal. The review is requested for the reason(s) stated in the arguments below, demonstrating the clear legal and factual deficiency of the rejections of some or all claims.

Claims 1–3, 6–7, 10–12, 15–16, 19–21, 24–25 and 28–29 were rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,094,421 to *Scott*. Independent claims 1, 10 and

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19 each recite a beam forming network transmitting directed scanning beam signals each directed substantially only to wireless access devices within a different one of a plurality of sectors, the network transmitting the same start of frame field for a TDD frame to all wireless access devices within more than one of the sectors, then subsequently transmitting first downlink data traffic to only wireless access devices within one of said sectors in a downlink portion of the TDD frame. Such a feature is not found in the cited reference. The cited portion of *Scott* merely teaches that directional antennas may optionally be employed and, if so employed, may be accommodated by an adjustment interval within a frame:

> The antenna adjustment interval 1017 may be of sufficient duration to allow transmission of a data symbol indicating selection of a particular antenna beam or permitting minor adjustments to the angle of a directional antenna at the base station 302, or permitting selection of one or more antennas if the base station 302 is so equipped.

Scott, column 22, lines 57–63. Nothing in the cited portion of *Scott* suggests using directional antennae to transmit a start of frame to all devices within all sectors, but transmit certain download traffic to substantially only devices within one cell sector.

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If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at ***dvenglarik@munckbutrus.com***.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: 10-10-2006

Daniel E. Venglarik
Registration No. 39,409

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(972) 628-3621 (direct dial)
(972) 628-3600 (main number)
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OIPE
OCT 13 2006
PATENT & TRADEMARK OFFICE

DOCKET NO. WEST14-00103 **PATENT**
Customer No. 23990

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before application of:	:	Paul F. Struhsaker
Serial No.	:	09/948,059
Filed	:	September 5, 2001
For	:	WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION
Group No.	:	2616
Examiner	:	Salman Ahmed

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

Sir:

NOTICE OF APPEAL

Applicant hereby appeals to the Board of Appeals from the decision dated June 7, 2006, of the Primary Examiner finally rejecting Claims 1-29.

Applicant respectfully requests a one (1) month extension of time for filing a Notice of Appeal in response to the final Office Action dated June 7, 2006. The response period is presently set to expire on September 7, 2006, and if this Request for Extension of Time is granted, the new response date will be October 7, 2006 (Saturday). Since Monday, October 9, 2006 is a Federal Holiday (Columbus Day), the response is extended to Tuesday, October 10, 2006.

10/13/2006 CNGUYEN 00000028 09948059
02 FC:2401 250.00 OP

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A check in the amount of $310.00 is enclosed in payment of the Notice of Appeal filing fee ($250.00) and one-month extension fee ($60.00). The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Munck Butrus Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: 10-10-2006

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OIPE IAP12
OCT 13 2006
PATENT & TRADEMARK OFFICE

DOCKET NO. WEST14-00103
Customer No. 23990

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Paul F. Struhsaker
Serial No.	:	09/948,059
Filed	:	September 5, 2001
For	:	WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION
Group No.	:	2616
Examiner	:	Salman Ahmed

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

Sir:

PETITION FOR EXTENSION OF TIME

Applicant respectfully requests a one (1) month extension of time for filing a Notice of Appeal in response to the final Office Action mailed June 7, 2006. The response period is presently set to expire on September 7, 2006, and if this Petition for Extension of Time is granted, the new response date will be October 7, 2006 (Saturday). Since Monday, October 9, 2006 is a Federal Holiday (Columbus Day), the response is extended to Tuesday, October 10, 2006.

10/13/2006 CNGUYEN 00000028 09948059
01 FC:2251 60.00 OP

PETITIONER NOKIA
Ex.1012

A check in the amount of $310.00 is enclosed for the Notice of Appeal filing fee ($250.00) and one-month extension fee ($60.00). The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Munck ButrusDeposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: 10-10-2006

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OIPE IAP12 OCT 13 2006 PATENT & TRADEMARK OFFICE

DOCKET NO. WEST14-00103 **PATENT**
Customer No. 23990

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	:	Paul F. Struhsaker
Serial No.	:	09/948,059
Filed	:	September 5, 2001
For	:	WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION
Group No.	:	2616
Examiner	:	Salman Ahmed

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

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

Sir:

The undersigned hereby certifies that the following documents:

1. Notice of Appeal;
2. Pre-Appeal Brief Request for Review;
3. Petition for Extension of Time - one month (in duplicate);
4. Check in the amount of $310.00 for the Notice of Appeal filing fee ($250.00) and one-month extension fee ($60.00); and
5. A postcard receipt

relating to the above application, were deposited as "First Class Mail" with the United States Postal Service, addressed to MAIL STOP AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 10, 2006.

Date: 10/10/06

Kathy Cedar
Mailer

Date: 10-10-2006

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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	58057	Frame same direct$5 same (beam or signal) and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 13:50
L2	488	Frame same direct$5 same broadcast same (beam or signal) and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 13:50
L3	488	(Frame same direct$5 same broadcast same (beam or signal)) and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 13:51
L4	214	(Frame same direct$5 same broadcast same (beam or signal) same (data or payload)) and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 13:52
L5	11	(Frame same direct$5 same broadcast same (beam or signal) same (data or payload)) and TDD and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 13:59
L6	17	(Frame same direct$5 same omni) and TDD and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 14:10
L7	211	(Frame same direct$5 same omni) and (@rlad<"20010119" or @ad<"20010119")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/04 14:11

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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	718	((base adj station) or basestation) and (TDD or (time adj division adj duplex)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/05 08:46
L2	422	(((base adj station) or basestation) and (TDD or (time adj division adj duplex))).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/05 08:47
L3	90	(((base adj station) or basestation) and (TDD or (time adj division adj duplex$3)) and direct$3 and (signal or beam)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/05 08:50
L4	32	(((base adj station) or basestation) and (TDD or (time adj division adj duplex$3)) and direct$3 and (signal or beam) and frame).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/05 08:57
L5	4	(((base adj station) or basestation) and (TDD or (time adj division adj duplex$3)) and direct$3 and (signal or beam) and frame and (header or preamble)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/12/05 08:58

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Ex.1012

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/948,059	09/05/2001	Paul F. Struhsaker	WEST14-00103	5591

7590 12/06/2006

NOVAKOV DAVIS & MUNCK
A PROFFESSIONAL CORPORATION
900 THREE GALLERIA TOWER
13155 NOEL ROAD
DALLAS, TX 75240

EXAMINER	
AHMED, SALMAN	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 12/06/2006

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

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	09/948,059	STRUHSAKER, PAUL F.	
	Hassan Kizou	Art Unit 2616	

Document Code - AP.PRE.DEC

Notice of Panel Decision from Pre-Appeal Brief Review

This is in response to the Pre-Appeal Brief Request for Review filed 10/13/06.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

   ☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
   ☐ The request does not include reasons why a review is appropriate.
   ☐ A proposed amendment is included with the Pre-Appeal Brief request.
   ☐ Other:

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☐ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

   ☐ The panel has determined the status of the claim(s) is as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

3. ☒ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) *Hassan Kizou*. HK (3)_____.

(2) *Salman Ahmed*. SA (4)_____.

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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 01/22/2007

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13155 NOEL ROAD
DALLAS, TX 75240

EXAMINER	
AHMED, SALMAN	
ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 01/22/2007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/948,059	09/05/2001	Paul F. Struhsaker	WEST14-00103	5591

TITLE OF INVENTION: WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$300	$0	$1000	04/23/2007

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 07/06) Approved for use through 04/30/2007.

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PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 01/22/2007

NOVAKOV DAVIS & MUNCK
A PROFFESSIONAL CORPORATION
900 THREE GALLERIA TOWER
13155 NOEL ROAD
DALLAS, TX 75240

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/948,059	09/05/2001	Paul F. Struhsaker	WEST14-00103	5591

TITLE OF INVENTION: WIRELESS ACCESS SYSTEM USING SELECTIVELY ADAPTABLE BEAM FORMING IN TDD FRAMES AND METHOD OF OPERATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$700	$300	$0	$1000	04/23/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
AHMED, SALMAN	2616	370-280000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. 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 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, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/948,059	09/05/2001	Paul F. Struhsaker	WEST14-00103	5591

7590 01/22/2007

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900 THREE GALLERIA TOWER
13155 NOEL ROAD
DALLAS, TX 75240

EXAMINER	
AHMED, SALMAN	
ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 01/22/2007

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1088 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1088 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 07/06) Approved for use through 04/30/2007.

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Notice of Allowability	Application No.	Applicant(s)	
	09/948,059	STRUHSAKER, PAUL F.	
	Examiner	Art Unit	
	Salman Ahmed	2616	

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Pre-Brief Conference Request*.

2. ☒ The allowed claim(s) is/are *1-29*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1 line 11 "boradcast" has been changed to –broadcast--.

Claim 10 line 11 "boradcast" has been changed to –broadcast--.

Allowable Subject Matter

1. Claims 1-29 are allowed.

2. The following is an examiner's statement of reasons for allowance:

The prior arts of record do not teach the following:

In regards to claims 1, 10 and 19 the prior arts do not teach transmitting at a start of a TDD frame a broadcast beam signal to wireless access devices within more than one of the sectors, the broadcast beam signal comprising a start of frame field and subsequently transmitting in a downlink portion of the TDD frame, first downlink data traffic to substantially only wireless access devices within one of the sectors using one of the directed scanning beam signal(s).

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The prior arts alone or in combination fail to jointly suggest or teach the claimed combination of features as taught by the instant application. Therefore claims 1-29 are to be deemed allowable over prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salman Ahmed whose telephone number is (571)272-8307. The examiner can normally be reached on 8:30 am - 5:00 pm.

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.

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

Art Unit 2616

SA
12/4/2006

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

PETITIONER NOKIA
Ex.1012

Notice of References Cited	Application/Control No. 09/948,059	Applicant(s)/Patent Under Reexamination STRUHSAKER, PAUL F.	
	Examiner Salman Ahmed	Art Unit 2666	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,094,421	07-2000	Scott, Logan	370/280
*	B	US-6,470,057	10-2002	Hui et al.	375/294
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Baum et al. (Performance analysis of an adaptive OFDM packet data system; Broadband Communications, 2000. Proceedings. 2000 International Zurich Seminar on 15-17 Feb. 2000 Page(s):237 – 243)
	V	·Wireless in-building network architecture and protocols Buchholz, D.; Odlyzko, P.; Taylor, M.; White, R.; Communications, 1992. ICC 92, Conference record, SUPERCOMM/ICC '92, Discovering a New World of Communications. IEEE International Conference on 14-1
	W	·Integrated video and data transmission in the TDD ALOHA-reservation wireless LAN Tasaka, S.; Hayashi, K.; Ishihashi, Y.; Communications, 1995. ICC 95 Seattle, Gateway to Globalization, 1995 IEEE International Conference on Volume 3, 18-22 June 1995 Page
	X	

*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.

OIPE JC21
FEB 06 2003
PATENT & TRADEMARK OFFICE

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. 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 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known	
Application Number	09/948,059
Filing Date	September 5, 2001
First Named Inventor	Paul F. Struhsaker
Art Unit	2681
Examiner Name	Not yet assigned
Attorney Docket Number	WEST14-00103

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number: Number - Kind Code[2] (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
SR	AA	US- 6,181,955	01/30/2001	Dartois	
		US-			
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3] -Number[4] - Kind Code[5] (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	T[6]
SR	AB	WO 96/37970	11/28/1996	Nokia Telecommunications OY		

Examiner Signature		Date Considered	1/7/06

*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.

[1] 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. [5] 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.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PETITIONER NOKIA
Ex.1012