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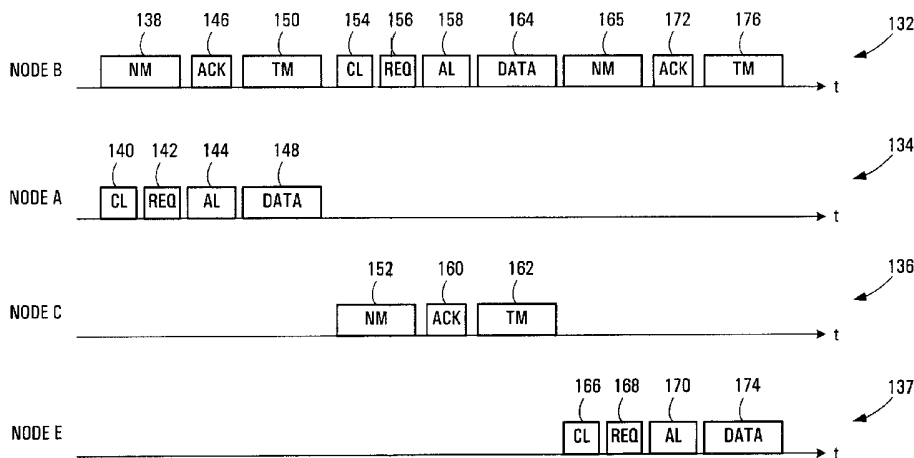
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[Continued on next page]

(54) Title: TRANSIT LINK COORDINATION SYSTEMS AND METHODS FOR A DISTRIBUTED WIRELESS COMMUNICATION NETWORK

NM - NEIGHBOURHOOD MODE
ACK - ACKNOWLEDGE
TM - TRAFFIC MODE
CL - CHANNEL LISTEN
REQ - REQUEST
AL - ACK LISTEN



(57) Abstract: Systems and methods of coordinating transit links between network nodes in a wireless communication network are disclosed. Transit links between a network node and respective neighbouring network nodes are monitored for communications control signals from any of the neighbouring network nodes, and a particular transit link is selected for data exchange upon receipt of a communications control signal. Each transit radio link antenna beam at a network node is thereby aligned with a respective neighbouring network node when the neighbouring node sends a communications control signal.

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INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LAL D ET AL: "A novel MAC layer protocol for space division multiple access in wireless ad hoc networks" COMPUTER COMMUNICATIONS AND NETWORKS, 2002. PROCEEDINGS. ELEVENTH INTERNATIONAL CONFERENCE ON , 14-16 OCT. 2002, 14 October 2002 (2002-10-14), pages 614-619, XP010610948 * par. II and III *	1-11, 27-35, 40-43
X	EP 1 063 789 A (SONY INT EUROP GMBH) 27 December 2000 (2000-12-27) abstract paragraph '0002! - paragraph '0022!; claims 1-4	1-11, 27-35, 40-43, 49,50
E	EP 1 404 043 A (VKR HOLDING AS) 31 March 2004 (2004-03-31) paragraphs '0019! - '0027!, '0055! - '0058!, '0076!; claims 1-8	44,45
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Y	claims 1-7	22-26, 47,48
Y	KALIA M ET AL: "DATA SCHELDULING AND SAR BLUETOOTH MAC" VTC 2000-SPRING. 2000 IEEE 51ST. VEHICULAR TECHNOLOGY CONFERENCE PROCEEDINGS. TOKYO, JAPAN, MAY 15-18, 2000, IEEE VEHICULAR TECHNOLOGY CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 2 OF 3. CONF. 51, 15 May 2000 (2000-05-15), pages 716-720, XP000967963 ISBN: 0-7803-5719-1 abstract page 717	22-26, 47,48
P,X	US 2003/214914 A1 (CAIN JOSEPH BIBB) 20 November 2003 (2003-11-20) abstract paragraph '0038! paragraphs '0045! - '0047! paragraph '0054!	49
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/CA 03/01806

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>SANCHEZ R J ET AL: "RDRN: a rapidly deployable radio network-implementation and experience" UNIVERSAL PERSONAL COMMUNICATIONS, 1998. ICUPC '98. IEEE 1998 INTERNATIONAL CONFERENCE ON FLORENCE, ITALY 5-9 OCT. 1998, NEW YORK, NY, USA, IEEE, US, 5 October 1998 (1998-10-05), pages 93-97, XP010314866 ISBN: 0-7803-5106-1 paragraphs '0001!, '0003!, '4.2.1!</p>	49,50
A	<p>WO 02/078369 A (SRIKRISHNA DEVABHAKTUNI ;BEHROOZI CYRUS (US); CHARI AMALAVOYAL (US) 3 October 2002 (2002-10-03) page 15, line 11 - line 17</p>	1-11, 27-35, 40-43
A	<p>WO 00/70572 A (HONEYWELL INC ; HELGESON MICHAEL A (US)) 23 November 2000 (2000-11-23) page 7, line 7 - line 22 page 25, line 18 - page 26, line 4 claims 1,3,10</p>	12-26, 36-39, 44-48
A	<p>JOHANSSON P ET AL: "Bluetooth: an enabler for personal area networking" IEEE NETWORK, IEEE INC. NEW YORK, US, vol. 15, September 2001 (2001-09), pages 28-37, XP002243905 ISSN: 0890-8044 pages 35-36</p>	12-26, 36-39, 44-48
A	<p>NASIPURI A ET AL: "A MAC protocol for mobile ad hoc networks using directional antennas" WIRELESS COMMUNICATION AND NETWORKING CONFERENCE, vol. 3, 23 September 2000 (2000-09-23), pages 1214-1219, XP010532719 paragraphs '0001!, '03.1!, '03.2!</p>	49
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA 03/01806

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11, 27-35, 40-43

Method for selecting a communication link in a wireless network.

2. claims: 12-26, 36-39, 44-48

Method for scheduling data transmissions in a wireless network.

3. claims: 49,50

Wireless network with wireless nodes including a transit antenna system, an auxiliary antenna and a communication controller.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CA 03/01806

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