



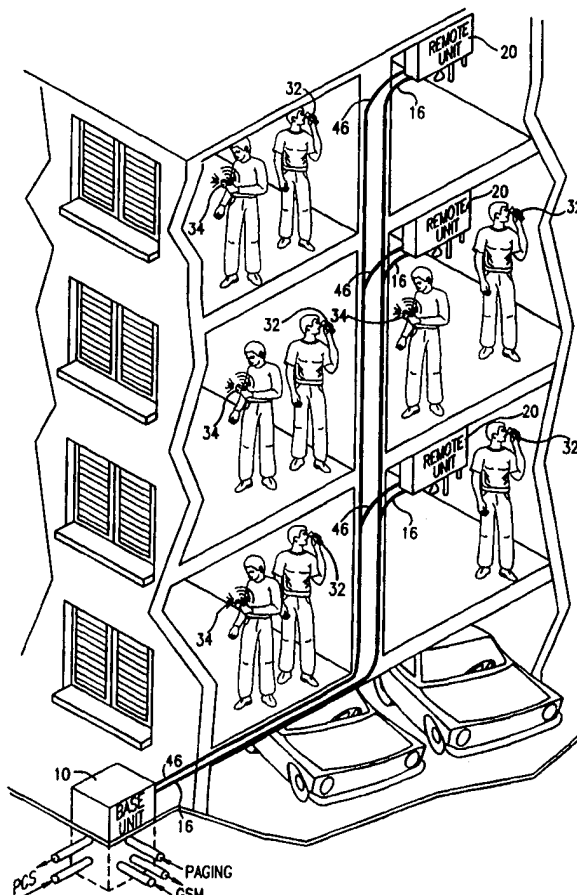
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(54) Title: WIRELESS COMMUNICATIONS STATION AND SYSTEM

(57) Abstract

A wireless communications station comprising a base unit (10) comprising of communications interface for communicating with plural wireless networks, a received communications combiner (12) for combining received signals from plural wireless communications networks into plural radio frequency outputs, at least one fiberoptic transmitter (14) receiving the single radio frequency output and providing optical output (16) and at least one fiberoptic receiver (22) for receiving optical signals and providing RF output, a plurality of remote units (20), each including plural antennas (220) for communicating with wireless communications networks and a received communications splitter (24) for splitting combined received communications signals from base unit and a transmit communications combiner (12) for combining transmit communications signals.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL97/00411

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : H04Q 7/22; H04B 10/24, 10/00, 1/00, 7/204; H04J 13/00

US CL : 455/422; 359/113, 152, 172; 370/311, 328, 18; 379/69

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 455/422; 359/113, 152, 172; 370/311, 328, 18; 379/60; 359/114, 135, 145; 455/612, 139, 273; 370/95, 338, 347, 315, 313; 379/58, 59

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, IPSS 2, NETSCAPE

MICROCELLULAR, OPTICAL, COMMUNICATIONS NETWORK, BASE STATION, REMOTE UNIT, MOBILE UNIT, WIRELESS, OPTICAL FIBER

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 5,644,622 A (RUSSELL ET AL) 01 July 1997, col.16. lines 20-63, col. 10, lines 32-50 col. 13, lines 21-35 col.14,lines 26-48, col.4, lines 31-41, col. 34, lines 57-67 and col.35, lines 1-62.	1,3-6,9, 13-14and 21-23
X	US 5,280,472 A (GILHOUSEN ET AL) 18 January 1994, col.17, lines 36-48, col. 7, lines 53-68.	2, 7, 8, 15 and 16
X,P	US 5,696,862 A (HAUER ET AL) 09 December 1997, col. 1, lines 5-67	10 and 18
X	US 5,400,419 A (HEINEN) 21 March 1995, col. 3, lines 45-54.	11 and 19
X	US 5,125,100 A (KATZNELSON) 23 June 1992, col. 8, lines 1-21.	12-20



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