

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 March 2006 (30.03.2006)

PCT

(10) International Publication Number
WO 2006/033821 A3

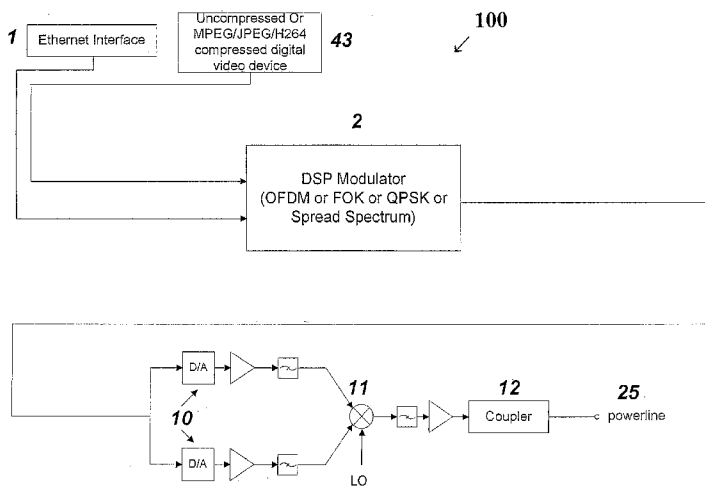
- (51) International Patent Classification:
G08B 1/08 (2006.01) G05B 11/01 (2006.01)
B60Q 1/48 (2006.01) H04B 1/38 (2006.01)
- (21) International Application Number:
PCT/US2005/031640
- (22) International Filing Date:
7 September 2005 (07.09.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/608,022 8 September 2004 (08.09.2004) US
11/029,755 5 January 2005 (05.01.2005) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
12 July 2007

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR TRANSMITTING DIGITAL DATA OVER VARIOUS COMMUNICATION MEDIA



(57) Abstract: A system (100) is described for transmitting video signals over various communication media using digital signal processing techniques. An embodiment of the system uses an orthogonal frequency division multiplexing (OFDM) modulation process that enables high-speed data communications of Ethernet and/or MPEG or JPEG or H264 compressed or uncompressed digital video (1). A second embodiment frequency modulates the OFDM modulated signal (FM-OFDM). The first and second embodiments are implemented with a transmit Ethernet interface, an MPEG or JPEG or H264 compressed or uncompressed digital video (1) capture device, and a modem including a modulator and demodulator that provides communication with several other modem devices along communication media such as power lines, wireless (air), cable, or twisted pairs.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31640

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G08B 1/08(2006.01);B60Q 1/48(2006.01);G05B 11/01(2006.01);H04B 1/38(2006.01)**

USPC: 340/538,932.2,310.11,310.12;375/219

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. : 340/538,932.2,310.11,310.12;375/219

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)
EAST database: detecting, monitoring, parking lot, cameras, power line communication.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,405,261 A (GAUCHER) 11 June 2002, see entire document.	17-35
Y	US 6,426,708 A (TRAJKOVIC et al.) 30 July 2002, see entire document.	17-35
Y	US 6,709,172 A (BROWN) 23 March 2004, see col. 2, lines 55-61	20 and 21

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search
27 March 2007 (27.03.2007)

Date of mailing of the international search report

10 MAY 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/31640

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

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

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

2. Claim 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. Claim 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:
Group I, claims 1-35, drawn to a security monitoring system, classified in class 340/531.

Group II, claims 36-43, drawn to modulation technique, classified in class 375/257.

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.