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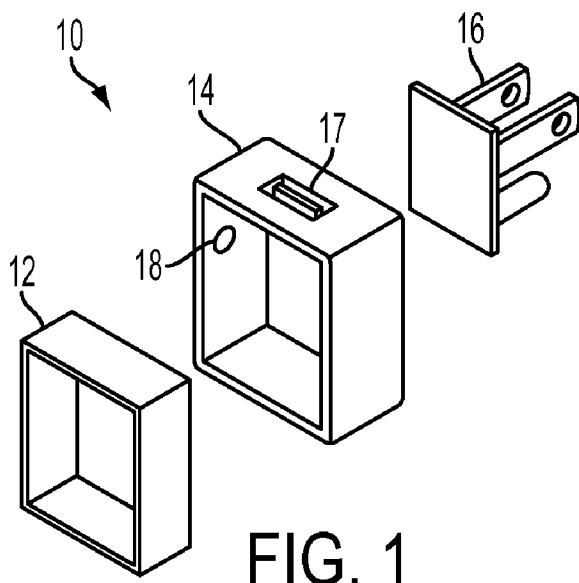
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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[Continued on next page]

(54) Title: METHODS FOR NETWORKING CONSUMER DEVICES



(57) Abstract: Systems and methods for enrolling nodes into an ad hoc network associated with a multi-roomed structure. Nodes within the ad hoc network comprise a communication module configured to communicate with the ad hoc network using at least one of room-limited communications and room-transparent communications.

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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2013/050821

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. G01S1/68 H04W4/04 H04L12/28 G08B21/18 H05B37/02  
 ADD.  
 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)  
 G01S H04W H04L G08B H04B H05B

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)  
 EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/265799 A1 (SIBERT W OLIN [US]) 30 October 2008 (2008-10-30) the whole document	1-9,18, 21
A	WO 2006/095316 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; PITCHERS STEPHEN M [GB]; SIMONS P) 14 September 2006 (2006-09-14) the whole document	1,2
A	WO 2006/095315 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; PITCHERS STEPHEN M [GB]; SIMONS P) 14 September 2006 (2006-09-14)	1,2
A	WO 01/97466 A1 (RED M COMMUNICATIONS LTD [GB]; SHAW DANIEL [GB]) 20 December 2001 (2001-12-20) the whole document	1,2

Further documents are listed in the continuation of Box C.  See patent family annex.

\* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>
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Date of the actual completion of the international search  10 October 2013	Date of mailing of the international search report  08/01/2014
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Dupuis, Hervé
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2013/050821

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 fees, this Authority did not invite payment of additional fees.
  
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.:

see additional sheets

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/050821

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008265799 A1	30-10-2008	US 2008265799 A1 US 2012013257 A1	30-10-2008 19-01-2012
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**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

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

1. claims: 1-9, 18, 21

method comprising based on node data received from the first node determining a room function of the single room

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2. claims: 10, 11, 20

method comprising causing a visual display of the multi-room structure

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3. claim: 12

method comprising controlling a function of a consumer product associated with the first node based on an input by a user of the computing device

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4. claims: 13, 14

method wherein the ad hoc network comprises a bridge node

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5. claims: 15-17

method wherein the transmission is caused by the activation of a light switch

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6. claim: 19

method comprising determining a spatial distance

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