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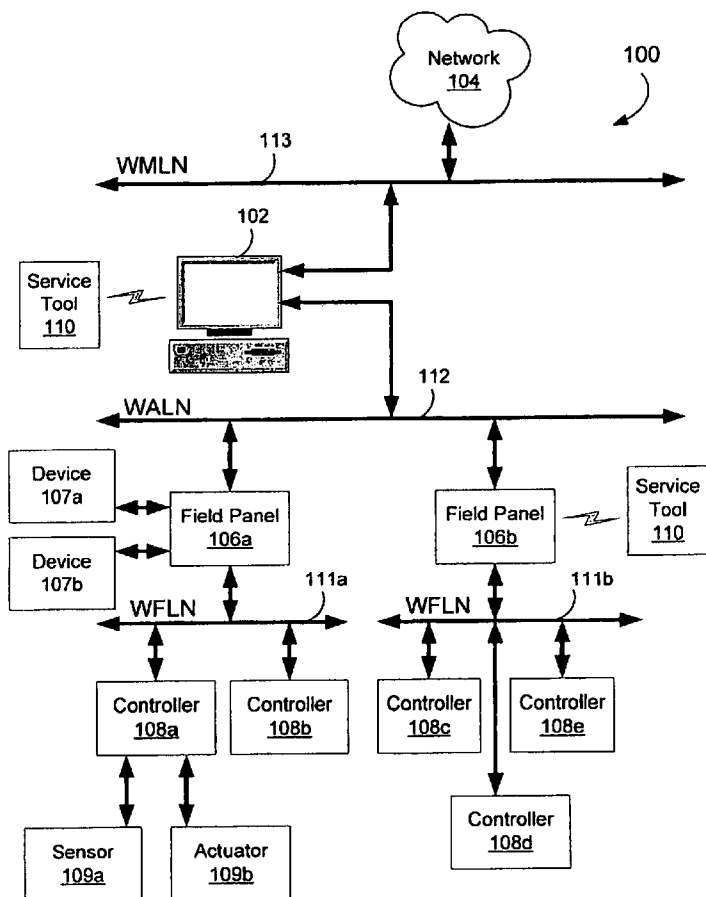
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(54) Title: SERVICE TOOL FOR WIRELESS AUTOMATION SYSTEMS



(57) Abstract: A service tool (110, 410) accesses a building automation system (100, 500) to configure and confirm design of an installation, monitor and optimize functionality, commission communication protocols, diagnose, analyze and troubleshoot problems, analyze communications between components, adjust and/or reconfigure parameters, monitor, analyze and debug a building automation system (100), its components (107, 106, 108, 109), and the like. The service tool (110, 410) provides a man-machine interface to the building automation system (100) and its components (107, 106, 108, 109) by communicating directly and/or indirectly with the system (100) and its components. The interface displays information about the system (100), its components. The wireless service tool (110, 410) may operate in multiple modes and/or provide multiple functionality.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/029741 A (ROCKWELL AUTOMATION TECH INC [US]) 8 April 2004 (2004-04-08) abstract paragraph [0029] paragraph [0084] paragraphs [0107], [0108] paragraphs [0112], [0113] claim 1 figures 1,2,9	1-21
X	US 2002/027504 A1 (DAVIS JAMES [US] ET AL) 7 March 2002 (2002-03-07) abstract figures 1,2 paragraph [0023] paragraph [0025] paragraph [0027] paragraph [0073]	1-21

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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 A	US 6 553 336 B1 (JOHNSON ROBERT N [US] ET AL) 22 April 2003 (2003-04-22) abstract claims 1-7 paragraph [0057] paragraph [0061] paragraph [0097]	1,12,19 2-11, 13-18, 20,21
X A	----- US 5 224 648 A (SIMON BERNARD S [US] ET AL) 6 July 1993 (1993-07-06) abstract claims 1,5 figures 1-4 column 2, lines 33-58 column 3, lines 23-35 column 4, lines 33-51	1,12,19 2-11, 13-18, 20,21
A	----- US 2003/102979 A1 (JEDNACZ THOMAS C [US] ET AL) 5 June 2003 (2003-06-05) abstract figures 1,2 paragraph [0003] paragraphs [0045], [0046] -----	19-21

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/US2007/008031

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2004029741 A	08-04-2004	AU 2003273360 A1 CN 1701289 A EP 1554637 A2 KR 20050061486 A US 2004203874 A1	19-04-2004 23-11-2005 20-07-2005 22-06-2005 14-10-2004
US 2002027504 A1	07-03-2002	NONE	
US 6553336 B1	22-04-2003	NONE	
US 5224648 A	06-07-1993	AU 3475793 A WO 9320495 A1	08-11-1993 14-10-1993
US 2003102979 A1	05-06-2003	CN 1163685 A DE 69635475 D1 DE 69635475 T2 EP 0788689 A2 WO 9702677 A2 JP 10505732 T	29-10-1997 29-12-2005 03-08-2006 13-08-1997 23-01-1997 02-06-1998