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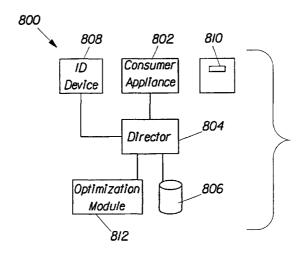
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(54) Title: METHOD AND SYSTEM FOR OPTIMIZING PERFORMANCE OF CONSUMER APPLIANCES



(57) Abstract: A system and method for optimizing performance of a consumer appliance, including: a consumer appliance; a work piece identifier; a director in communication with the consumer appliance; a data store in communication with the director; an identification device in communication with the director; and an optimization module in communication with the director, having executable instructions for determining optimized operating conditions of the consumer appliance. One exemplary embodiment is a method of optimizing processing conditions based on environmental conditions. The method comprises the steps of providing a consumer appliance having one or more sensors in communication with a director and sensing one or more environmental conditions from the sensors. The sensors might then communicate the environmental conditions to the director and to an optimization module in communication with the director. Finally, the optimization module might be configured to optimize the processing conditions based on the environmental conditions.



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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 D06F39/00 D06F D06F93/00 D06F33/02 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) IPC 7 D06F 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 practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category 1 1 - 12US 5 438 507 A (GOLDSTAR CO. LTD.) χ 1 August 1995 (1995-08-01) the whole document 1-3,5,6US 5 603 233 A (HONEYWELL INC.) χ 18 February 1997 (1997-02-18) the whole document 16-18 EP 0 392 196 A (BOSCH-SIEMENS HAUSGERÄTE χ GMBH) 17 October 1990 (1990-10-17) claims; figures 1,4,7, EP 0 619 395 A (GOLDSTAR CO. LTD.) χ 12 - 15, 12 October 1994 (1994-10-12) 19,21, 22,25,26 5,8-11, the whole document Α 20 -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. χ χ 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 "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the '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 document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "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 docucitation or other special reason (as specified) O document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but "&" document member of the same patent family later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 22/02/2002 12 February 2002 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Courrier, G

### N :RNATIONAL SEARCH REPORT

Inte dional Application No
PCT/US 01/18893

C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.		
Category °				
X	DE 198 10 907 A (F. ROELL) 16 September 1999 (1999-09-16) the whole document	1,4,7, 12-15, 19-22,26		

### IN PRNATIONAL SEARCH REPORT

Information on patent family members

Inter Laional Application No
PCT/US 01/18893

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5438507	Α	01-08-1995	KR CN JP JP	9511609 B1 1097478 A ,B 2951517 B2 7008676 A	06-10-1995 18-01-1995 20-09-1999 13-01-1995
US 5603233	Α	18-02-1997	NONE		
EP 392196	A	17-10-1990	DE AT DD DE EP ES	3911862 A1 101214 T 296128 A5 59004461 D1 0392196 A1 2048878 T3	18-10-1990 15-02-1994 21-11-1991 17-03-1994 17-10-1990 01-04-1994
EP 619395	Α	12-10-1994	KR DE DE DK EP JP US	9511598 B1 69419446 D1 69419446 T2 619395 T3 0619395 A1 6304379 A 5388299 A	06-10-1995 19-08-1999 20-01-2000 29-11-1999 12-10-1994 01-11-1994 14-02-1995
DE 19810907	Α	16-09-1999	DE	19810907 A1	16-09-1999