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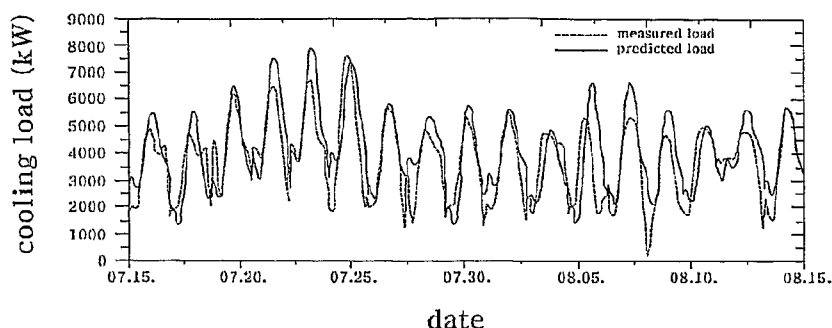
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(54) Title: METHOD FOR PREDICTING COOLING LOAD

[Fig. 5]



(a) Hourly cooling load

(57) **Abstract:** Disclosed is a method for predicting the cooling load for efficient operation of a heat accumulation system by obtaining a prediction function regarding outdoor air temperature and specific humidity from meteorological office data, predicting the outdoor air temperature and specific humidity by using the prediction function and the highest and lowest temperatures of the weather forecast, and predicting the cooling load based on the sensible heat load coefficient, outdoor air coefficient, sensible heat load constant, and latent heat load constant, which are obtained from the building design data. The cooling load can be predicted without using a complicated mathematical model and with no reference to past operation data regarding the target building, but solely based on four air-conditioning design values of the building and the highest and lowest temperatures of the next day, which can be easily obtained from the weather forecast of the meteorological office.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2008/006668**A. CLASSIFICATION OF SUBJECT MATTER****F24F 11/02(2006.01)i**

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 F24F 11/00, 11/02; F28D 20/00; G01K 13/00, 17/00; G05B 13/02, 17/02, 21/02; G06F 9/455, 17/00

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

Korean utility models and applications for utility models since 1975
Japanese utility models and applications for utility models since 1975

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

eKIPASS (KIPO Internal) & Keywords: latent, sensible, load, demand, predict*, accumulate*, outdoor, and enthalpy

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2617444 B2 (TOKYO ELECTRIC POWER CO. INC. et al.) 4 June 1997 See the whole document.	1-4
A	KR 10-0753141 B1 (GAGYOTECH et al.) 30 August 2007 See the whole document.	1-4
A	KR 10-0327995 B1 (YANG, HAE WOON) 9 March 2002 See the whole document.	1-4
A	JP 05-040506 A (NISSIN ELECTRIC CO., LTD.) 19 February 1993 See the whole document.	1-4
A	JP 2002-267235 A (OSAKA GAS CO., LTD.) 18 September 2002 See the whole document.	1-4
A	JP 05-264086 A (HITACHI LTD.) 12 October 1993 See the whole document.	1-4

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

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2617444 B2	04.06.1997	None	
KR 10-0753141 B1	30.08.2007	None	
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JP 05-040506 A	19.02.1993	None	
JP 2002-267235 A	18.09.2002	None	
JP 05-264086 A	12.10.1993	None	