

A. CLASSIFICATION OF SUBJECT MATTER***H02J 7/34(2006.01)i, H02M 3/04(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 8: H02J 3/02, 7/00, 7/34, H02M 3/04

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) "power", "module", "sub-module"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 6784568 B2 (POWERS, DANIEL J.) 31 August 2004 See the abstract; figure 1 | 1-34 |
| A | US 6433444 B1 (VRIES, THOMAS P. DE) 13 August 2002 See the abstract; figure 2 | 1-34 |
| A | US 6201319 B1 (SIMONELLI, JAMES M. et al.) 13 March 2001 See the abstract; figure 7 | 1-34 |

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent 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 citation or other special reason (as specified)

"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

"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

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

21 SEPTEMBER 2007 (21.09.2007)

Date of mailing of the international search report

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Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2007/008430

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|--|--|
| US06784568B2 | 31.08.2004 | None | |
| US06433444B1 | 13.08.2002 | AU200137061A1 AU200137061A5 EP01260011A1 EP1260011A1 US6433444BA W00161824A1 W0200161824A1 | 27.08.2001 27.08.2001 27.11.2002 27.11.2002 13.08.2002 23.08.2001 23.08.2001 |
| US06201319B1 | 13.03.2001 | None | |