

INTERNATIONAL SEARCH REPORT

International application No. PCT/JP2010/062662
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A. CLASSIFICATION OF SUBJECT MATTER
H01L41/083(2006.01) i, F02M51/06(2006.01) i, H01L41/187(2006.01) i, H01L41/22(2006.01) i, H02N2/00(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)
 H01L41/083, F02M51/06, H01L41/187, H01L41/22, H02N2/00

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

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2010
Kokai Jitsuyo Shinan Koho	1971-2010	Toroku Jitsuyo Shinan Koho	1994-2010

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 3-248483 A (Hitachi Metals, Ltd.), 06 November 1991 (06.11.1991), page 4, lower left column, line 16 to lower right column, line 15; fig. 3 & US 5153477 A & GB 2242312 A & DE 4105997 A1	1-4, 6-10 5, 11
Y A	JP 7-106654 A (Hitachi Metals, Ltd.), 21 April 1995 (21.04.1995), paragraph [0006]; fig. 7 (Family: none)	1-4, 6-10 5, 11
Y	JP 2001-267646 A (Taiheiyō Cement Corp.), 28 September 2001 (28.09.2001), paragraphs [0013] to [0038]; fig. 1 to 3 (Family: none)	1-4, 6-10

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

* 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 cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"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 application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 13 August, 2010 (13.08.10)	Date of mailing of the international search report 24 August, 2010 (24.08.10)
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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.
Y	WO 2007/102369 A1 (Kyocera Corp.), 13 September 2007 (13.09.2007), paragraphs [0185] to [0193]; fig. 25 & US 2009/0162706 A1 & EP 2003706 A1 & CN 101395731 A	3