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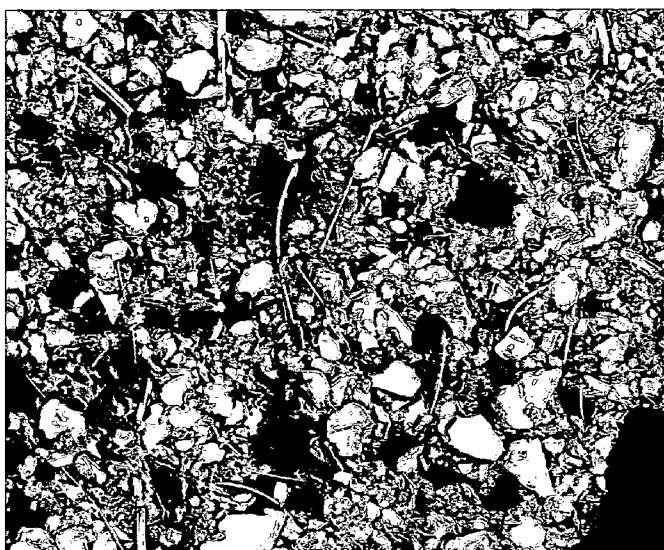
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- Published:**
- with international search report
  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) **Title:** LOW EXPANSION CEMENT COMPOSITIONS FOR CERAMIC MONOLITHS

FIG. 2



(57) **Abstract:** Disclosed are cement compositions for applying to honeycomb substrates. The cement compositions contain an inorganic powder batch composition; a binder; a liquid vehicle; and an elastic modulus reducing additive. The elastic modulus reducing additive can contain a ceramic fiber or a monohydrated alumina. The cement compositions are well suited for forming ceramic diesel particulate wall flow filters. Also disclosed herein are end plugged wall flow filters that include the disclosed cement compositions and methods for the manufacture thereof.

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23 July 2009

**INTERNATIONAL SEARCH REPORT**

International application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. C04B35/195 C04B38/00

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)  
C04B

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, WPI Data, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 489 277 A (IBIDEN CO LTD [JP]) 22 December 2004 (2004-12-22) paragraph [0048] - paragraph [0063] paragraphs [0110], [0111] paragraphs [0131], [0132] example 1	1-22
X	US 2005/103232 A1 (GADKAREE KISHOR P [US] ET AL) 19 May 2005 (2005-05-19) examples 1,2	1-22
A	EP 1 580 181 A (NGK INSULATORS LTD [JP]) 28 September 2005 (2005-09-28) paragraph [0047] - paragraph [0051] examples 1-16 claims 1-17	1-22
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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 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 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

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# INTERNATIONAL SEARCH REPORT

International application No.  
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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.
A	EP 0 816 065 A (IBIDEN CO LTD [JP]; NISSAN DIESEL MOTOR CO [JP]) 7 January 1998 (1998-01-07) example 1  -----	1-22

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2008/012462

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: 1-11 (incompletely)  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 1-11 (incompletely)

The present independent claims 1 and 7 relate to an extremely large number of possible compositions. Support and disclosure in the sense of Article 6 and 5 PCT is to be found however for only a very small proportion of the compositions claimed, see paragraphs 67 - 75. The expression "for" is to be interpreted as "suitable for" and the terms "source" and "vehicle" are considered as too broad. The non-compliance with the substantive provisions is to such an extent, that the search was performed taking into consideration the non-compliance in determining the extent of the search of claims 1 and 7 (PCT Guidelines 9.19 and 9.23).

Claims 2 - 6 and 8 - 11 are dependant on claims 1 and 7, respectively and are subject to the same objections as above. The search of claims 1 to 11 was therefore restricted to those claimed compositions which appear to be supported (see examples E1 - E8) and a fair generalisation thereof.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/012462
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