A precast concrete slab connector for connecting two adjacent slabs in edge-by-edge juxtaposition, each with a recess in registry with a recess in an adjacent slab. A pair of anchor plates are positioned the slab recesses and a shear plate spans the slabs recesses and overlies the anchor plates. The shear plate has openings that are in registry with one of an anchor plate opening. Multiple fasteners are extend through the openings in the anchor plates and the shear plates and include removable retainers that clamp the shear plates and the anchor plates together. The fasteners can be cast in part into each adjacent slab. Serration can be provided with facing surfaces of the anchor plates and the shear plate or on facing surfaces of the shear plate and washers that are mounted on the fastener.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

E04B 1/61(2006.01)i, E04B 1/04(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)

E04B 1/61; E02D 27/01; E04B 1/58; E04B 1/04; E04B 2/74

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

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: precast concrete, connector, plate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>JP 07-247601 A (NIPPON CEMENT CO., LTD.) 26 September 1995</td>
<td>1-3, 12, 16</td>
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<td>Y</td>
<td>See figures 1-7.</td>
<td>5-6, 11, 14-15, 21</td>
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<td>JP 11-343676 A (NIPPON LIGHT METAL CO., LTD.) 14 December 1999</td>
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<td>See figures 1-12.</td>
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<td>Y</td>
<td>JP 09-038396 A (MATSUZOTO MIE) 14 January 1997</td>
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<td>A</td>
<td>JP 06-264518 A (OZAWA CONCRETE KOGYO KK.) 20 September 1994</td>
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* 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

31 AUGUST 2012 (31.08.2012)

Date of mailing of the international search report

03 SEPTEMBER 2012 (03.09.2012)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office

189 Cheongna-ro, Seo-gu, Daegu Metropolitan City, 302-791, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

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Telephone No. 82-42-481-8415

Form PCT/ISA/210 (second sheet) (July 2009)
INTERNATIONAL SEARCH REPORT

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.:
   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:

3. ☒ Claims Nos.: 17
   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 all searchable claims.

2. □ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

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.

Form PCT/ISA/210 (continuation of first sheet (2)) (July 2009)
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