Title (en)
   PRECAST CONCRETE BUILDING UNITS

Title (de)
   BETONFERTIGBAUEINHEITEN

Title (fr)
   UNITÉS DE CONSTRUCTION EN BÉTON PRÉFABRIQUÉES

Publication
   EP 2061937 A4 20100113 (EN)

Application
   EP 06776020 A 20060824

Priority
   • EG 2006000032 W 20060824
   • EG 2006080448 A 20060817

Abstract (en)
   [origin: WO2008019699A1] This hybrid pre-cast / cast insitu panels invention consists of three, stepped down slabs with protruding steel bars (1) to connect to a central cast insitu sections that allow steel to run not only between the sandwiching panels but also at right angles throughout length of room past the supports and on to the adjacent bays on either side thereby distributing the generated moments to all four room supports and even beyond to the adjacent bays on all sides due to the stiff formed monolithic slab, concurrently shear is reduced by distributing it to not two but all four sides. Walls and column moments are reduced due to their flexible connection to the slabs and due to their running continuously from footings to the roof. Thus this invention widens the scope of applications of structural pre-cast concrete with thinner slabs carrying more loads over longer spans, thinner walls and columns making even the foundations lighter; ideal for high rises and large spaces such as malls and garages that have high stresses using relatively small standard pre-cast off the shelve panels to create large structures.

IPC 8 full level
   E04B 5/43 (2006.01); **E04C 2/06** (2006.01)

CPC (source: EP US)
   E04B 1/164 (2013.01 - EP US); **E04B 1/34823** (2013.01 - EP US); **E04B 5/43** (2013.01 - EP US); **E04C 3/34** (2013.01 - EP US)

Citation (search report)
   • [XI] US 1516074 A 19241118 - BORG FREDRIK G
   • [A] US 3788012 A 19740129 - ARNOLD S
   • See references of WO 2008019699A1

Designated contracting state (EPC)
   AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
   WO 2008019699 A1 20080221; **WO 2008019699 A8 20110303**; EA 019161 B1 20140130; EA 200970205 A1 20091230; EG 27117 A 20160623; EP 2061937 A1 20090527; EP 2061937 A4 20100113; EP 2061937 B1 20130703; ES 2429565 T3 20131115; JP 2010518275 A 20100527; JP 4991855 B2 20120801; MA 30697 B1 20090901; PL 2061937 T3 20131231; US 2009151298 A1 20090618; ZA 200901017 B 20100728

DOCDB simple family (application)
   EG 2006000032 W 20060824; EA 200970205 A 20060824; EG 2006080448 A 20060817; EP 06776020 A 20060824; ES 06776020 T 20060824; JP 2009524079 A 20060824; MA 31676 A 20090227; PL 06776020 T 20060824; US 35937109 A 20090126; ZA 200901017 A 20090212