

Title (en)  
Fixing Devices

Title (de)  
Befestigungsvorrichtungen

Title (fr)  
Dispositifs de fixation

Publication  
**EP 1486629 A2 20041215 (EN)**

Application  
**EP 04102483 A 20040603**

Priority  
GB 0313368 A 20030610

Abstract (en)  
A fixing device (2) consists of a threaded rod (4) having tool engaging heads (8) at each end (6). The heads (8) have a maximum width which is smaller than the diameter of the rod (4). A nut (30) is fitted to the rod (4). The fixing device can be inserted from one side through a load limiting washer (26), an embedment (20) and into a threaded bore (12) in a shutter (10). After the concrete has been cast the rod (4) can be removed from the other side leaving the nut (30) in the concrete behind the embedment (20). <IMAGE>

IPC 1-7  
**E04G 21/18**; **E04G 15/06**

IPC 8 full level  
**E04B 1/41** (2006.01); **E04G 15/06** (2006.01); **E04G 21/18** (2006.01)

CPC (source: EP)  
**E04B 1/4107** (2013.01); **E04B 1/4121** (2013.01); **E04G 15/061** (2013.01); **E04G 21/185** (2013.01)

Citation (applicant)  
• GB 2145460 A 19850327 - RUND STAHL BAU GMBH & CO  
• CA 2375070 A1 20020608 - 4254563 MANITOBA LTD [CA]

Cited by  
EP3514297A1; DE102018101251A1; US2019226200A1; US10570610B2

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

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**EP 1486629 A2 20041215**; **EP 1486629 A3 20050810**; GB 0313368 D0 20030716; GB 2402698 A 20041215; GB 2402698 B 20050525

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