

Title (en)

ROUND TIMBER MOTORWAY CRASH BARRIERS AND MANUFACTURING METHODS

Publication

**EP 0318405 B1 19920122 (FR)**

Application

**EP 88430028 A 19881104**

Priority

FR 8716682 A 19871127

Abstract (en)

[origin: EP0318405A1] A crash barrier according to the invention comprises wooden posts (1) supporting a horizontal rail (2) composed of round wooden elements (31, 32 ...) which are assembled end-to-end by means of two metal strap plates (41, 42) and by means of bolts (5). The strength of the assemblies is reinforced by incorporating, in the ends of each round wooden element, vertical metal rods (8) which intersect the plane of the assembly bolts and which are located on the same side of the bolt (5) as the end of the round wooden element which forms part of the assembly.  
<IMAGE>

IPC 1-7

**E01F 15/00; E04B 1/26; E04H 17/14**

IPC 8 full level

**E01F 15/00** (2006.01); **E01F 15/04** (2006.01); **E04B 1/26** (2006.01); **E04H 17/14** (2006.01)

CPC (source: EP US)

**E01F 15/0453** (2013.01 - EP US); **E04B 1/2604** (2013.01 - EP US); **E04H 17/1413** (2013.01 - EP US); **E04H 17/146** (2021.01 - EP);  
**E04B 2001/2644** (2013.01 - EP US); **E04B 2001/2652** (2013.01 - EP US); **E04B 2001/2668** (2013.01 - EP US); **E04H 17/146** (2021.01 - US);  
**Y10T 403/7123** (2015.01 - EP US)

Cited by

FR2718473A1; FR2658214A2; FR2770236A1; EP0933484A3; EP0442830A1; US5169127A

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0318405 A1 19890531; EP 0318405 B1 19920122**; AT E71997 T1 19920215; CA 1308951 C 19921020; DE 3868024 D1 19920305;  
ES 2029067 T3 19920716; FI 87818 B 19921113; FI 87818 C 19930225; FI 885494 A0 19881125; FI 885494 A 19890528;  
FR 2623829 A1 19890602; FR 2623829 B1 19910913; NO 885211 D0 19881123; NO 885211 L 19890529; US 4946138 A 19900807

DOCDB simple family (application)

**EP 88430028 A 19881104**; AT 88430028 T 19881104; CA 583740 A 19881122; DE 3868024 T 19881104; ES 88430028 T 19881104;  
FI 885494 A 19881125; FR 8716682 A 19871127; NO 885211 A 19881123; US 27514888 A 19881122