

Title (en)  
Shoring frame for retaining panels.

Title (de)  
Spannrahmen für Verbauplatten.

Title (fr)  
Cadre d'étayage pour panneaux de soutènement.

Publication  
**EP 0095193 A1 19831130 (DE)**

Application  
**EP 83105184 A 19830525**

Priority  
DE 3219636 A 19820525

Abstract (en)  
1. A bracing frame for shoring plates (1 and 2) supporting the walls of a trench comprising at least two superposed braces (5 and 6) which are pivoted at both ends about level pivot pins (10) in vertical abutment posts (3 and 4) supporting the shoring plates and are held by means of springs (15) so as to be generally at a right angle to the abutment posts, characterized in that support faces (11 and 11') which are curved parallel to the pivot pins (10) or are inclined, are present at the ends of the braces (5 and 6), and on the abutment posts (3 or 4) abutment faces (12 and 12') are present which correspond to the support faces (11 and 11'), said abutment faces (12 and 12') forming with the support faces (11 and 11') at least two spring sockets (13, 13' and 14, 14') at each brace end, such sockets having a cross section which tapers in the plane of the pivoting of the braces (5 and 6) in both directions of pivoting and in each spring socket (13, 13' and 14, 14') a roller-like elastomeric spring member (15) is inserted with a pretensioning effect as a spring.

Abstract (de)  
Dieser Spannrahmen weist mindestens zwei übereinander angeordnete Spreizen (5, 6) auf, die beidseitig um horizontale Schwenkachsen (10) schwenkbar in lotrechten, die Verbauplatten abstützenden Widerlagerpfosten (3, 4) gelagert und mittels Federn im wesentlichen rechtwinklig zu den Widerlagerpfosten (3, 4) gehalten sind. Zur Bildung wartungsfreier, leichter, progressiver und leicht auswechselbarer Federn an den Spreizenenden sind an den Stirnenden der Spreizen (5, 6) parallel zu den Schwenkachsen (10) gewölbte Stützflächen (11, 11') und am Widerlagerpfosten (3 oder 4) mit den Stützflächen (11, 11') korrespondierende Widerlagerflächen (12, 12') angeordnet, die zusammen mit den Stützflächen (11, 11') an jedem Spreizenende mindestens zwei Federkammern (13, 13', 14, 14') bilden, deren Querschnitte sich in der Schwenkebene der Spreizen (5, 6) in beiden Schwenkrichtungen keilförmig verengen, und in jeder Federkammer (13, 13', 14, 14') ist unter Vorspannung ein walzenförmiger gummielastischer Federkörper (15) als Feder eingesetzt.

IPC 1-7  
**E02D 17/08**

IPC 8 full level  
**E02D 17/08** (2006.01)

CPC (source: EP)  
**E02D 17/08** (2013.01); **E02D 17/083** (2013.01)

Citation (search report)  
• [AP] GB 2094373 A 19820915 - MORRIS ALAN  
• [A] DE 2832321 A1 19800131 - EMUNDS JOSEF ING GRAD  
• [A] DE 1279559 B 19681003 - SUPERIOR SCAFFOLD CO  
• [A] FR 2195240 A5 19740301 - KRINGS JOSEF [DE]  
• [A] FR 1508801 A 19680105

Cited by  
GB2231353A; GB2231352A; EP0810328A3; EP0167991A3; EP2453062A1; CN108517875A; EP3325726A4; AU2016297711B2; WO9516081A1; WO2017011921A1; US10604906B2; US11286634B2

Designated contracting state (EPC)  
AT BE CH DE FR GB LI NL

DOCDB simple family (publication)  
**EP 0095193 A1 19831130; EP 0095193 B1 19851218**; AT E17027 T1 19860115; DE 3219636 A1 19831201; DE 3361550 D1 19860130

DOCDB simple family (application)  
**EP 83105184 A 19830525**; AT 83105184 T 19830525; DE 3219636 A 19820525; DE 3361550 T 19830525