

Title (en)  
APPARATUS FOR SHORING TRENCHES WITH LINING PANELS

Publication  
**EP 0046553 B1 19841128 (DE)**

Application  
**EP 81106351 A 19810815**

Priority  
DE 3031099 A 19800816

Abstract (en)  
[origin: EP0046553A1] The device for staying the walls of an excavation comprises armour plates with large plane surfaces (2, 3) of which the edges of each side are guided and supported by guiding grooves (5, 5') arranged on the stays (1). The stays are arranged by pairs facing each other and held in that position by struts (10). To decrease the resistance to friction between the plates (2, 3) and the stays (1) there are provided rollers (8, 11, 16) having horizontal axis. Each side of the guiding grooves (5, 5') of the stays which is farther from the wall of the excavation is provided with an array of rollers (8, 11, 16) mounted on the stays (1).

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

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

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

Cited by  
DE4230860A1; EP0502362A1; EP0100083A1; EP0921235A1; US6164874A; DE29616986U1; DE29703190U1; WO8400572A1

Designated contracting state (EPC)  
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**EP 0046553 A1 19820303; EP 0046553 B1 19841128**; AT E10522 T1 19841215; AU 547591 B2 19851024; AU 7455581 A 19820317; CA 1156996 A 19831115; DE 3031099 A1 19820225; DE 3167469 D1 19850110; ES 260250 U 19820316; ES 260250 Y 19821016; ES 505279 A0 19820816; ES 8205914 A1 19820816; JP H0341611 B2 19910624; JP S57501333 A 19820729; WO 8200674 A1 19820304; YU 197081 A 19840229; ZA 815627 B 19820825

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