

Title (en)  
CUTTING SHIELD FOR DIGGING OPEN TRENCHES IN THE GROUND

Title (de)  
MESSERSCHILD ZUM VORTRIEB VON OFFENEN GRÄBEN IM BODEN

Title (fr)  
BOUCLIER PORTE-LAMES POUR LE CREUSEMENT DE TRANCHEES OUVERTES DANS LE SOL

Publication  
**EP 0630436 B1 19970827 (DE)**

Application  
**EP 93906542 A 19930318**

Priority  
• DE 4208972 A 19920319  
• EP 9300645 W 19930318

Abstract (en)  
[origin: WO9319253A1] A cutting shield for digging open trenches in the ground has at least three superimposed sheeting elements that are movable with respect to each other in the longitudinal direction and that support the side walls (2) of the trench. Each sheeting element has a pair of opposite blades (6) for staying and supporting the side walls (2) of the trench and two traverses (8) which link the blades (6) of each pair of blades (6), forming a framework. The superimposed sheeting elements are mutually linked by at least one advance jack (20). The linking spots between each advance jack (20) and the upper blade (6) on the one hand and the lower blade (6) on the other hand are horizontally offset. The two last pairs of blades (6) nearest to the bottom (4) of the trench are supported by staying means on the bottom (4) of the trench.

IPC 1-7  
**E02F 5/10**; **E02D 17/08**; **E21D 9/06**

IPC 8 full level  
**E02D 17/08** (2006.01); **E02F 5/10** (2006.01); **E21D 9/06** (2006.01)

CPC (source: EP)  
**E02D 17/086** (2013.01); **E02F 5/10** (2013.01); **E02F 5/101** (2013.01); **E21D 9/0692** (2013.01)

Designated contracting state (EPC)  
CH ES FR GB IT LI PT

DOCDB simple family (publication)  
**WO 9319253 A1 19930930**; DE 4208972 C1 19931202; EP 0630436 A1 19941228; EP 0630436 B1 19970827; ES 2108268 T3 19971216

DOCDB simple family (application)  
**EP 9300645 W 19930318**; DE 4208972 A 19920319; EP 93906542 A 19930318; ES 93906542 T 19930318