

Title (en)  
TRENCH-SHORING DEVICE

Publication  
**EP 0167114 B1 19881012 (DE)**

Application  
**EP 85107977 A 19850627**

Priority  
DE 3423853 A 19840628

Abstract (en)  
[origin: ES288077U] A cribbing device for trenches which includes a pair of opposing supports spaced apart by a spreader, each support having a plurality of guide profiles and a crosspiece. The crosspiece is disposed transversely to the longitudinal axis of the trench, and the guide profiles are arranged adjacent each other on said crosspiece. The guide profiles include a plurality of legs disposed vertically and extending outward from the crosspiece, and a plurality of flanges disposed vertically and secured to the legs at the ends of the legs opposite the crosspiece. The flanges project beyond both sides of the legs. A plurality of cribbing boards each having a guide bar which supports a guide head is provided. The guide head is in the form of a slotted hollow box section and extends vertically beyond the board at its vertical face side. The width of each guide profile flange is slightly smaller than the inside width of the guide heads. The slot of the guide heads corresponds to the legs of the guide profiles, and the inside spacings between the legs of the adjacent guide profiles is slightly larger than the total width of the guide heads. The boards may, therefore, be guided and supported by the supports by engaging the guide heads of the boards with the guide profiles of the supports thereby permitting the boards to be passed by each other on parallel planes and to be supported by the supports in a form-locked manner.

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

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

CPC (source: EP KR US)  
**E02D 17/00** (2013.01 - KR); **E02D 17/08** (2013.01 - EP US)

Citation (examination)  
• DE 2949312 A1 19810611 - EMUNDS & STAUDINGER GMBH & CO [DE]  
• DE 2302053 A1 19740718 - KRINGS JOSEF  
• EP 0023566 A2 19810211 - KRINGS JOSEF  
• DE 2345859 A1 19750130  
• DE 3246093 C1 19840614 - KRINGS JOSEF  
• DE 3031099 A1 19820225 - GRUBIC OHG TIEFBAUUNTERNEHMEN [DE]  
• DE 3423853 A1 19860116 - KRINGS INTERNATIONAL INH JOSEF [DE]

Cited by  
US5399057A; DE29616986U1; DE4140815A1; EP0502362A1; DE10017764A1; DE10017764C2; DE4139829A1; EP0475382A1; GB2231352A

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

DOCDB simple family (publication)  
**EP 0167114 A2 19860108; EP 0167114 A3 19860716; EP 0167114 B1 19881012**; AT E37918 T1 19881015; AU 4429285 A 19860102; AU 562082 B2 19870528; BG 45048 A3 19890315; BR 8503267 A 19860401; CA 1243290 A 19881018; DE 3423853 A1 19860116; DE 3423853 C2 19891012; DK 155224 B 19890306; DK 155224 C 19890717; DK 290385 A 19851229; DK 290385 D0 19850627; EG 17395 A 19900630; ES 288077 U 19851116; ES 288077 Y 19860616; FI 77290 B 19881031; FI 77290 C 19890210; FI 852499 A0 19850625; FI 852499 L 19851229; GR 851566 B 19851125; HU 192237 B 19870528; HU T40175 A 19861128; IE 56684 B1 19911106; IE 851621 L 19851228; IL 75652 A0 19851031; IL 75652 A 19900429; IN 164833 B 19890610; JP S6168926 A 19860409; KR 860000452 A 19860129; MA 20468 A1 19851231; NO 852525 L 19851230; OA 08047 A 19870131; PL 147168 B1 19890429; PL 254208 A1 19860617; PT 80725 A 19850701; PT 80725 B 19861112; SU 1463140 A3 19890228; US 4657442 A 19870414; ZA 854850 B 19870930

DOCDB simple family (application)  
**EP 85107977 A 19850627**; AT 85107977 T 19850627; AU 4429285 A 19850628; BG 7085085 A 19850626; BR 8503267 A 19850628; CA 485206 A 19850625; DE 3423853 A 19840628; DK 290385 A 19850627; EG 37785 A 19850626; ES 288077 U 19850627; FI 852499 A 19850625; GR 850101566 A 19850626; HU 252085 A 19850627; IE 162185 A 19850627; IL 7565285 A 19850627; IN 476CA1985 A 19850625; JP 13807685 A 19850626; KR 850004608 A 19850627; MA 20695 A 19850627; NO 852525 A 19850624; OA 58621 A 19850625; PL 25420885 A 19850627; PT 8072585 A 19850627; SU 3913609 A 19850627; US 74957285 A 19850627; ZA 854850 A 19850627