

Title (en)  
APPARATUS FOR LAYING PIPELINES WITHOUT EXCAVATION

Publication  
**EP 0496981 A3 19921125 (DE)**

Application  
**EP 91120644 A 19911130**

Priority  
DE 4042140 A 19901228

Abstract (en)  
[origin: EP0496981A2] Apparatus for laying pipelines without excavation in earth which is not rocky, consisting of a drawn clearing head (1) with passage openings (8) for the earth and a follow-up pipe (12; 27; 28, 29; 38) connected to it. The clearing head preferably consists of a first pipe (2, 18) of smaller diameter and a concentric second pipe (3, 19) of larger diameter surrounding the first pipe (2, 18). The diameter of the second pipe (3, 19) corresponds to the diameter of the bore for the pipeline to be laid. The first pipe and the second pipe are connected to one another by at least three radially arranged webs (4, 20). A hauling rope running through a pilot bore (30) or a pneumatically driven percussion drilling device, which provide for the advance of the clearing head with the follow-up pipe, can be hung in the clearing head. <IMAGE>

IPC 1-7  
**E21B 7/26**; **E21B 7/28**; **E21B 7/20**; **E21B 17/02**

IPC 8 full level  
**E21B 7/20** (2006.01); **E21B 7/26** (2006.01); **E21B 7/28** (2006.01); **E21B 7/30** (2006.01); **E21B 17/02** (2006.01)

CPC (source: EP US)  
**E21B 7/205** (2013.01 - EP US); **E21B 7/28** (2013.01 - EP); **E21B 7/30** (2013.01 - EP); **E21B 17/02** (2013.01 - EP US)

Citation (search report)  
• EP 0368079 A1 19900516 - BGV VERFAHRENSTECHNIK GMBH [DE]  
• EP 0339210 A1 19891102 - BROCHIER FA HANS [DE]  
• EP 0353442 A2 19900207 - SCHMIDT PAUL [DE]  
• DE 8607206 U1 19870723  
• EP 0411278 A1 19910206 - TRACTO TECHNIK [DE]  
• DE 3942934 A1 19910627 - MUELLER HANS [DE]  
• US 3730283 A 19730501 - KOSTYLEV A, et al  
• US 3674099 A 19720704 - KOSTYLEV ALEXANDR DMITRIEVICH, et al

Cited by  
DE10297180B4; CN108590692A; DE19749007A1; DE19749007C2; US6644887B2; FR2809449A1

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