

Title (en)
Hydraulic excavator for shield tunneling machine.

Title (de)
Hydraulischer Abbaubagger für Tunnelschildmaschine.

Title (fr)
Excavateur hydraulique pour machine d'avancement de tunnel à bouclier.

Publication
EP 0649973 A3 19950809 (DE)

Application
EP 94115326 A 19940929

Priority
DE 4335753 A 19931020

Abstract (en)
[origin: DE4335753C1] Hydraulically driven mining excavator for a driving apparatus, provided with a longitudinal conveyor unit for excavated material, for underground driving. The mining excavator has a boom to which a working tool which can be used as a loading tool can be attached at least directly at one end. At the other end, the boom is swivellable about a pivot bearing attached to a top supporting part of the driving apparatus. In this arrangement, a hydraulic cylinder is provided to vary the boom inclination, and the working tool or the means which can be attached to the boom at one end can be swivelled about a transverse axis arranged on the boom by means of at least one further hydraulic cylinder supported on the boom, and the boom (21) is suspended by means of a guide-bar system on a bracket plate (16) forming a part of the pivot bearing (15). The guide-bar system consists of a link (18) pivotable via hydraulic cylinder (19) and of the hydraulic cylinder (20) for varying the boom inclination. By longitudinal adjustment, the hydraulic cylinder (20) can be set as a parallel guide bar to the link (18). <IMAGE>

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E21D 9/08; E21D 9/12

IPC 8 full level
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CPC (source: EP KR)
E21D 9/0875 (2016.01 - EP KR); **E21D 9/128** (2013.01 - EP KR)

Citation (search report)
• [A] DE 2705950 A1 19780817 - POLENSKY & ZOELLNER
• [A] EP 0359944 A2 19900328 - HOLZMANN PHILIPP AG [DE]
• [A] CH 647040 A5 19841228 - HERRENKNECHT MARTIN INGENIEURB [DE]
• [A] US 4387928 A 19830614 - STEVENS RICHARD W
• [A] US 3613383 A 19711019 - FIKSE TYMAN H
• [A] DE 3326219 A1 19850131 - GEWERK EISENHUETTE WESTFALIA [DE]
• [A] SOVIET INVENTIONS ILLUSTRATED Week 24, 25 July 1990 Derwent World Patents Index; AN 90-182918/24

Cited by
CN107893661A; CN103071576A; EP1807607A4

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EP 0649973 A2 19950426; EP 0649973 A3 19950809; EP 0649973 B1 19990203; AT E176518 T1 19990215; CN 1043918 C 19990630;
CN 1127322 A 19960724; DE 4335753 C1 19950105; DE 4335753 C2 19980709; DE 59407767 D1 19990318; ES 2128481 T3 19990516;
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