

Title (en)
Motorised grader.

Title (de)
Motorplaniergerät.

Title (fr)
Niveleuse.

Publication
EP 0233367 A1 19870826 (DE)

Application
EP 86117824 A 19861220

Priority
US 82142786 A 19860121

Abstract (en)
[origin: US4807461A] A main frame construction for a motor grader wherein the main frame comprises a rear unit, a center unit, and a front unit. Both rear and center units are box-like structures in cross sections with constant transverse dimensions, with constant metal specification, with continuous welds at all four corners running longitudinally of each unit, with but one weld junction at a location spaced rearwardly of the knee area supporting a saddle structure for the blade, and without the provision of extra structural members and arrangements at the knee area. Minimum section changes within the box structures of the rear and center units, the elimination of weld starts and stops provides a strong smooth section of main frame alleviating locally high stresses at the knee area for mounting the saddle. The very simplicity of the rear and center unit box-structure as described and depicted is the heart of the improved main frame. Further, the provision of weld spaced at each corner of the box frames, with a pair of weld spaces on each side thereof enables continuous and simultaneous welding of each pair of side weld spaces by a one pass process.

Abstract (de)
Die Rahmenkonstruktion eines Planiergerätes besteht aus einem vorderen und hinteren Rahmenteil (53, 51) von annähernd gleichem rechteckförmigem Querschnitt, die stirnseitig über durchgehende Schweißnähte (124, 132) verbunden sind, wobei die Schweißnähte in durch die gegenüberliegenden Stirnkanten der Rahmenteile (51, 52) gebildeten, V-förmigen Vertiefungen aufgenommen werden.

IPC 1-7
E02F 3/76

IPC 8 full level
E02F 3/76 (2006.01)

CPC (source: EP US)
E02F 3/7636 (2013.01 - EP US)

Citation (search report)

- [Y] FR 2048531 A5 19710319 - FRISCH GEB KG EISENWERK
- [A] GB 719728 A 19541208 - W A RIDDELL CORP
- [A] US 4340119 A 19820720 - MACDONALD JACK G
- [A] US 3739861 A 19730619 - JOHNSON H, et al
- [A] US 4071090 A 19780131 - EASTERLING GENE B
- [A] FR 2438094 A1 19800430 - CATERPILLAR TRACTOR CO [US]
- [A] US 4034876 A 19770712 - YANCEY JOHN W
- [Y] PATENT ABSTRACTS OF JAPAN, Band 9, Nr. 282 (M-428)[2005], 9. November 1985; & JP-A-60 123 633 (MITSUBISHI JUKOGYO K.K.) 02-07-1985

Cited by
EP1845014A1; US7594562B2; EP1621338A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0233367 A1 19870826; AU 6680486 A 19870723; BR 8700161 A 19871208; JP S62170619 A 19870727; US 4807461 A 19890228

DOCDB simple family (application)
EP 86117824 A 19861220; AU 6680486 A 19861219; BR 8700161 A 19870116; JP 1217387 A 19870121; US 82142786 A 19860121