

Title (en)

Opening and closing device for doors.

Title (de)

Einrichtung zum Öffnen und Schliessen von Toren.

Title (fr)

Dispositif d'ouverture et de fermeture des portes.

Publication

EP 0065611 A1 19821201 (DE)

Application

EP 81890091 A 19810526

Priority

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Abstract (en)

1. Apparatus for opening and closing a gate having a leaf (1), which is movable between two positions, in which said leaf is substantially at right angles to its other position, particularly between a substantially vertical closed position and a substantially horizontal open position, wherein said leaf constitutes the connecting rod of a slider crank mechanism having a crosshead guide (2), which is approximately parallel to the gate in one of its two end positions and having a crankshaft main bearing (3), which is stationary and disposed close to the line of intersection of the planes which contain the leaf in its end positions, particularly adjacent to the top edge of the opening to be closed by the gate, at least one carriage (5) is provided for actuating the leaf (1) and is guided for a movement that is substantially parallel to a plane that contains the leaf in one end position, preferably the open end position, and the carriage is connected to the leaf by at least one connecting device, which is pivoted to the carriage (5) on an axis (11) and by at least one plate (10), which is rigidly secured to the leaf and is provided with a cam track means for guiding the connecting device, which cam track means have different concave curvatures toward the leaf (1) along the length of said cam track means and are attached to the leaf at that end thereof which is adjacent to the crank shaft main bearing (3), characterized in that the connecting device is a rod (6) and the cam track means are constituted by cam slots (9), which are provided in the plate (10) and in which guide pins (7, 8) of the rod (6) are guided.

Abstract (de)

Die Erfindung betrifft eine Einrichtung zum Öffnen und Schließen von Toren, mit einem im wesentlichen parallel zu einer vom Torblatt in einer Endlage, insbesondere geradlinig, geführten Wagen (5), der mit dem Torblatt über eine drehbare Verbindungsstange (6) und eine am Torblatt (1) starr befestigte Platte (10) verbunden ist, wobei die Platte (10) Kurvenschlitze (9) besitzt, die entlang ihrer Länge unterschiedlich gekrümmt sind und in den Kurvenschlitzen (9) Führungszapfen (7, 8) der Verbindungsstange (6) geführt sind.

IPC 1-7

E05F 15/10

IPC 8 full level

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CPC (source: EP)

E05D 15/445 (2013.01); **E05F 15/668** (2015.01); **E05Y 2201/626** (2013.01); **E05Y 2900/106** (2013.01)

Citation (search report)

- DE 2756262 A1 19780629 - MEWALD FRANZ ING
- FR 2375419 A1 19780721 - MEWALD FRANZ [AT]

Cited by

DE102009060144A1; GB2136496A; GB2155991A; EP0299489A1; DE3723408A1; FR2531133A1; DE102009060144B4; WO2011076339A1

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