

Title (en)  
DOOR OR GATE CLOSURE

Title (de)  
TÜR- ODER TORVERSCHLUSS

Title (fr)  
FERMETURE DE PORTE OU DE PORTAIL

Publication  
**EP 1003952 B1 20021009 (DE)**

Application  
**EP 98942661 A 19980730**

Priority  

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Abstract (en)  
[origin: US6311757B1] The invention relates to a door or gate closing mechanism having essentially rectangular closing elements disposed horizontally and in parallel to one another which are movable in manner overlapping one another. The closing elements are driven in such a way that the second closing element is travelled at double the speed of the first and the third at three times the speed of the first and the last at a speed corresponding to the speed of the first closing element multiplied by the number of closing elements. Thus, only the bottom-most closing element is travelled over the full height at maximum drive speed during the opening or closing of the door while the remaining closing elements have to be travelled at a correspondingly lower speed over correspondingly shorter distances. In this way, overall a favourable energy balance is produced during the opening and closing of the door closing apparatus in accordance with the invention.

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IPC 8 full level  
**E05F 17/00** (2006.01); **E06B 9/06** (2006.01)

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Cited by  
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**US 6311757 B1 20011106**; AR 016620 A1 20010725; AT E225900 T1 20021015; AU 734521 B2 20010614; AU 9071298 A 19990308; BR 9811930 A 20000905; CA 2333675 A1 19990225; CN 1276847 A 20001213; DE 29714615 U1 19971127; DE 59805916 D1 20021114; EP 1003952 A1 20000531; EP 1003952 B1 20021009; HU P0003062 A2 20010129; HU P0003062 A3 20010928; JP 2001515163 A 20010918; KR 20010022851 A 20010326; NO 20000697 D0 20000211; NO 20000697 L 20000211; PL 338677 A1 20001120; TR 200000399 T2 20000522; WO 9909286 A1 19990225

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