

Title (en)  
DOOR CLOSER

Title (de)  
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Title (fr)  
FERME-PORTE AUTOMATIQUE

Publication  
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Application  
**EP 00901073 A 20000107**

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Abstract (en)  
[origin: WO0042283A1] The invention relates to a door closer (10), comprising a spring arrangement (14) which is tensed for opening the door and which provides the necessary closing moment for the door to close; and a gear mechanism (20 to 28) between the spring arrangement (14) and the door for influencing the force characteristic which changes through the opening angle of the door. The gear mechanism (20 to 28), which changes in its transmission ratio through the opening angle of the door has a first and a second toothed wheel (24, 28) which engage with each other and which are each formed by a circular gear ring. Said toothed wheels are mounted eccentrically in relation to their central points (42, 44), their axial distance being maintained. The first toothed wheel (28) is connected to an output shaft (30) and the second toothed wheel (24) is connected to a toothed wheel (22), coaxially in relation to its centre of rotation (38). Said toothed wheel (22) engages with a toothed rack (20) which is coupled with the spring arrangement (14). The axis of rotation (32) of the output shaft (30) extends through the centre of rotation (40) of the first toothed wheel (28). The entire device is arranged in such a way that the eccentricities of the toothed wheels (24, 28) resulting from their respective centre points (42, 44) and centres of rotation (38, 40) are point-symmetrical to their pitch point (46).

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