Title (en)
  DOOR CLOSER

Title (de)
  TÜRSCHLIESSER

Title (fr)
  FERME-PORTE AUTOMATIQUE

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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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