

Title (en)  
CENTRAL CLOSING DEVICE FOR SHOES

Title (de)  
ZENTRALVERSCHLUSS FÜR SCHUHE

Title (fr)  
SYSTEME DE FERMETURE CENTRALE POUR CHAUSSURES

Publication  
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Application  
**EP 94902634 A 19931227**

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Abstract (en)  
[origin: US5600874A] PCT No. PCT/DE93/01251 Sec. 371 Date Jul. 25, 1995 Sec. 102(e) Date Jul. 25, 1995 PCT Filed Dec. 27, 1993 PCT Pub. No. WO94/17686 PCT Pub. Date Aug. 18, 1994The object of the invention is to improve a central closing device for shoes with a rotationally supported cord disc for at least one cord-type tensioning member for closing the shoe in such a way that the number of rotations of the cord disc is limited without any increasing the space required. This object is achieved by the fact that both the cord disc (3) and a stationary member (1 or 41) each have mutually-cooperating tooth profiles (41a, 42a or 41b, 42b) having the same tooth pitch but of different diameters. Located in the intermediate space (49) created due to the different diameters of the tooth profiles (41a, 42a or 41b, 42b) is an idling pinion (43) of the same pitch, which meshes with the two tooth profiles (41a, 42a or 41b, 42b). At least one stop (46, 46') is provided to limit the travel of the idling pinion (43).

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IPC 8 full level  
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**US 5600874 A 19970211**; AT E155966 T1 19970815; AU 5693494 A 19940829; AU 677270 B2 19970417; DE 4303569 C1 19940303; DE 59307034 D1 19970904; EP 0682483 A1 19951122; EP 0682483 B1 19970730; ES 2107172 T3 19971116; JP 3557447 B2 20040825; JP H08506253 A 19960709; KR 960700642 A 19960224; WO 9417686 A2 19940818; WO 9417686 A3 19950810

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