

Title (en)
Chain drive tensioner and variator

Title (de)
Vorrichtung zum Spannen und Verstellen eines als Kette ausgebildeten Umschlingungstriebes

Title (fr)
Dispositif variateur et tendeur de chaîne

Publication
EP 0902170 A3 19991117 (DE)

Application
EP 98117110 A 19980910

Priority
DE 19740481 A 19970915

Abstract (en)
[origin: EP0902170A2] A timing chain (2) which links two camshafts, with one camshaft driving the other camshaft, is tensioned by a double, coaxial hydraulic cylinder (8, 9) which drives chain tensioners to press outwards against the chain. One tensioner includes a hydraulic ratchet (14) which locks that tensioner in the outer position and keeps the driving section of the chain tensioned. This ensures that the chain does not rattle during cold starting. During normal operation the hydraulic ratchets are opened.

IPC 1-7
F01L 1/348

IPC 8 full level
F01L 1/348 (2006.01)

CPC (source: EP)
F01L 1/348 (2013.01)

Citation (search report)
• [AD] DE 4429071 A1 19960222 - PORSCHE AG [DE], et al
• [A] US 5366415 A 19941122 - CHURCH KYNAN L [US], et al
• [A] DE 4433153 A1 19960321 - SCHAEFFLER WAEHLZLAGER KG [DE]

Cited by
US10487921B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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EP 0902170 A2 19990317; EP 0902170 A3 19991117; EP 0902170 B1 20030514; DE 19740481 A1 19990318; DE 59808335 D1 20030618

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