

Title (en)

Variable camshaft timing phaser having a housing and a driving element of two different materials

Title (de)

Nockenwellenversteller mit einem Gehäuse und einem Antriebselement aus zwei unterschiedlichen Werkstoffen

Title (fr)

Déphaseur d'arbre à cames avec un boîtier et un élément d'entraînement formé de deux matériaux différents

Publication

EP 1512846 A2 20050309 (EN)

Application

EP 04255337 A 20040902

Priority

US 50083903 P 20030905

Abstract (en)

A variable cam timing phaser for an internal combustion engine having at least one camshaft comprising a housing (104), a rotor (102), and a driving element (108). The housing (104) is has an outer circumference for accepting drive force, a circular notched (114) groove, and is made of a first material. The notched groove (114) may be axially centered between the leading and trailing edges of the housing (104) or adjacent to either of the leading or trailing edges of the housing. The rotor (102) connects to a camshaft coaxially located within the housing. The driving element (108) is made of a second material and is coaxially located around the outer circumference of the housing (104). The first material is aluminum or magnesium and the second material is steel. The driving element (108) may be a gear or a sprocket. The driving element (108) may be axially centered on the housing. <IMAGE>

IPC 1-7

F01L 1/344

IPC 8 full level

F01L 1/34 (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP US)

F01L 1/022 (2013.01 - EP US); **F01L 1/3442** (2013.01 - EP US); **F01L 1/024** (2013.01 - EP US); **F01L 2001/34453** (2013.01 - EP US); **F01L 2301/00** (2020.05 - EP US)

Cited by

DE102014221192A1; DE102014214119A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1512846 A2 20050309; JP 2005083384 A 20050331; US 2005051121 A1 20050310

DOCDB simple family (application)

EP 04255337 A 20040902; JP 2004257053 A 20040903; US 93218804 A 20040901