

Title (en)  
VEHICLE PASSAGE CONTROL DEVICE

Title (de)  
FAHRZEUGDURCHGANG-STEUERUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE CONTRÔLE DU PASSAGE DE VÉHICULES

Publication  
**EP 2402509 A1 20120104 (EN)**

Application  
**EP 10746214 A 20100224**

Priority  
• JP 2010052812 W 20100224  
• JP 2009042562 A 20090225

Abstract (en)  
Disclosed is a vehicle passage control device capable of suppressing damage and breakage of an opening/closing bar thereof to the minimum, and suppressing damage and the like of a vehicle to the minimum even if the vehicle collides with the opening/closing bar. The vehicle passage control device is a vehicle passage control device in which an opening/closing bar 12 that regulates passage of a vehicle is provided, the vehicle passage control device being installed at a passage gate of an entrance or exit of a toll road or the like. The vehicle passage control device performs opening/closing control for the opening/closing bar 12 to rotationally move and upspring obliquely upward in front in a passing direction of the vehicle. An inclined angle  $\theta$  at which the opening/closing bar 12 rotationally moves and upsprings obliquely upward remains within a range from approximately 25 degrees to approximately 55 degrees with respect to a road surface. A vehicle sensing sensor that senses a vehicle approaching a front of the opening/closing bar 12 is provided, and an instruction to open the opening/closing bar 12 is issued when the vehicle is sensed by the vehicle sensing sensor. When a predetermined load or more is applied to the opening/closing bar 12, an instruction to perform an opening operation is issued to the opening/closing bar 12.

IPC 8 full level  
**E01F 13/04** (2006.01)

CPC (source: EP KR US)  
**E01F 13/04** (2013.01 - KR); **E01F 13/06** (2013.01 - EP KR US)

Cited by  
DE102015209725A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**US 2011271593 A1 20111110**; CN 102317546 A 20120111; CN 102317546 B 20150401; EP 2402509 A1 20120104; EP 2402509 A4 20130522; JP 2010196367 A 20100909; JP 5264554 B2 20130814; KR 101393471 B1 20140513; KR 20110104985 A 20110923; WO 2010098334 A1 20100902

DOCDB simple family (application)  
**US 201013145280 A 20100224**; CN 201080007656 A 20100224; EP 10746214 A 20100224; JP 2009042562 A 20090225; JP 2010052812 W 20100224; KR 20117018197 A 20100224