

Title (en)

Motor antenna device for use with vehicles.

Title (de)

Motorantenne für Fahrzeuge.

Title (fr)

Dispositif d'antenne à moteur pour véhicules.

Publication

EP 0320242 A1 19890614 (EN)

Application

EP 88311595 A 19881207

Priority

- JP 31007987 A 19871208
- JP 31008087 A 19871208
- JP 31683687 A 19871215
- JP 31683787 A 19871215
- JP 31683887 A 19871215

Abstract (en)

A power source (RX) for a car radio receiver which is kept on-state is temporarily turned off by a starter switch (12). However, three-second timer (20) is arranged between the power source (RX) and an antenna motor (M) to keep the antenna motor (M) not driven for three seconds even when the power source (RX) is shut off. This prevents the motor antenna to be unnecessarily lifted and lowered every time when the starter switch is made on and off.

IPC 1-7

H01Q 1/10

IPC 8 full level

H01Q 1/10 (2006.01)

CPC (source: EP)

H01Q 1/103 (2013.01)

Citation (search report)

- [X] GB 2187597 A 19870909 - ASMO CO LTD, et al
- [XP] US 4733101 A 19880322 - GRAHAM DONALD E [US], et al
- [Y] PATENT ABSTRACTS OF JAPAN, vol. 10, no. 337 (E-454)[2393], 14th November 1986; JP-A-61 141 205 (ALPHA-DENSHI K.K.) 28-06-1986

Cited by

US5235344A; EP0447182A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0320242 A1 19890614; EP 0320242 B1 19931201; AU 2667588 A 19890608; AU 605945 B2 19910124; DE 3886016 D1 19940113; DE 3886016 T2 19940331

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