

Title (en)

Drive control apparatus for an electrically-driven type extensible/retractable antenna.

Title (de)

Steuereinrichtung zum Aus- und Einfahren einer motorgetriebenen Antenne.

Title (fr)

Dispositif de commande d'extension et de rétraction d'une antenne à moteur.

Publication

EP 0447182 B1 19951102 (EN)

Application

EP 91302063 A 19910312

Priority

JP 6441090 A 19900316

Abstract (en)

[origin: EP0447182A1] The apparatus comprises a motor (4) controllable by a control circuit (3) to be rotated in a normal or a reverse direction, a multi-threaded type worm (5) provided on an output shaft of the motor (4), a worm wheel (6) engaging with the worm (5), a drive gear (8) receiving a rotational force of the worm wheel (6) to allow it to be rotatably driven, a drive rope (9) having a rack in mesh with the drive gear (8) and adapted to be moved in a longitudinal direction upon the rotation of the drive gear (8), an extensible/retractable antenna element (10) driven by the drive rope to allow it to be extended or retracted, stopper means (12A, 12B) for mechanically stopping an extending or a retracting motion of the antenna element (10) when the antenna element (10) reaches an extension or a retraction limit, a shock absorber (13) made up principally of an elastic member for alleviating an impact force by which the antenna element (10) is stopped upon collision with the stopper means (12A, 12B), the elastic member being placed partway on a movable system from the output shaft of the motor (4) to impact portions (10A, 10B) colliding with the stopper means (12A, 12B), and switching means (14) provided in the control circuit (3) and adapted to cut off the power supply to the motor (4) when an elastic deformation of the shock absorber (13) is stopped. <IMAGE>

IPC 1-7

H01Q 1/10

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CPC (source: EP KR)

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