

Title (en)

Microprocessor-controlled device for a rotatable, extendable ladder or similar lifting arm.

Title (de)

Steuergerät mit einem Mikroprozessor für eine drehbare, ausfahrbare Leiter oder einen gleichartigen Hebearm.

Title (fr)

Dispositif de commande à microprocesseur pour échelle orientable déployable ou bras élévateur analogue.

Publication

**EP 0059901 A1 19820915 (FR)**

Application

**EP 82101486 A 19820226**

Priority

FR 8104449 A 19810305

Abstract (en)

1. A control device for a rotatable, extendable ladder or similar lifting arm including at least a control for raising and lowering, a control for extension and retraction and a control for rotation to the manual selection instruments for the desired movements, the activators of raising and lowering, of extension and retraction, and of rotation, said selection instruments being adapted to apply electric signals to a microprocessor control signal reader, the said microprocessor containing a memory : the maximal reach to not exceed a function of diverse selectable and predetermined parameters of use of the ladder ; a sequence of cyclic calculations of the actual reach from information given by sensors of vertical angle and extension length ; a cyclic sequence of comparison of the actual calculated reach with the maximal reach corresponding to pre-defined conditions of use and authorizing or not the movement requested ; characterized in that the said electric signals are representative of the direction of the command and the desired speed of execution of the desired movements and that the said microprocessor contains in its memory a deceleration law, for the movements of lowering and extension at least, in the predetermined terminal zones of the evolution of these movements corresponding to a certain approach to the predetermined maximal reach for the circumstances ; and cyclic comparison sequence for this approach of the control speed shown with the speed derived from the said law for each movement considered, destined to impose the said law when the control speed shown is excessive, by furnishing to the outputs of the microprocessor controlling these movements the signals representative of the control speed shown or automatically modified as a function of the said law ; said outputs being connected to the instruments of electric control proportional to the activation of the activators of the movements considered.

Abstract (fr)

Dispositif comprenant au moins une commande de dressage ou abaissement, de déploiement et repliement, et de pivotement de l'échelle à organes de sélection manuelle des mouvements désirés, dans laquelle lesdits organes de sélection sont adaptés pour fournir un signal électrique représentatif du sens de commande et de la vitesse désirée du mouvement, ces organes étant connectés à un microprocesseur (MPU) comprenant en mémoire les portées maximales à ne pas dépasser en fonction de divers paramètres sélectionnables et prédéterminés de mise en service de l'échelle, et une loi de décélération des mouvements dans des zones terminales d'approche de la portée maximale considérée.

IPC 1-7

**E06C 5/36**

IPC 8 full level

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CPC (source: EP)

**B66C 23/905** (2013.01); **E06C 5/36** (2013.01)

Citation (search report)

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