

Title (en)
Intelligent distributed control for elevators

Title (de)
Intelligent verteilte Steuerung für Aufzüge

Title (fr)
Commande intelligente décentralisée pour ascenseurs

Publication
EP 0663366 B1 19990804 (EN)

Application
EP 94120379 A 19941222

Priority
US 18030694 A 19940112

Abstract (en)
[origin: EP0663366A1] Distributed processing units (DPU) are applied to elevator dispatching and back-up architecture. They are localizing the processing functions by sensing and controlling local devices and serially transmitting up-dates to other DPUs via one or more communication media (18). This makes it possible to confine the wiring to local levels eliminating the need for a centralized processor. The distributed processing units (DPU) are designed as floor processing units (FPUa,FPUb,...) one on each floor (E1...), car processing units (CPUa,CPUb,...) in each car (2), group processing units (GPUa,GPUb,...) and signalling processing units (SPUa,SPUb,...) in the machine room (22). They all possess intelligence to communicate and to perform local control algorithms. The distributed control is structured as a neural network, the nodes being implemented by the distributed processing units (DPU). Depending on the function to be processed, there are main nodes (A0,B0,C0...) with additional back-up nodes (Aa,Ba,Ca...) and auxiliary nodes (A1,A2,A3...). The inventive, distributed control is characterized by modularity, configurability and simplicity, providing reduced development cycle, ease of maintenance and increased reliability. <IMAGE>

IPC 1-7
B66B 1/18

IPC 8 full level
B66B 1/00 (2006.01); **B66B 1/18** (2006.01); **B66B 1/24** (2006.01); **B66B 1/34** (2006.01); **B66B 13/14** (2006.01)

CPC (source: EP)
B66B 1/18 (2013.01)

Cited by
US9126806B2; EP1195345A4; CN111071891A; CN1084289C; GB2364991A; GB2364991B; US5955708A; EP0870717A4; EP4219369A1; US9580271B2; US8534426B2; US6439349B1; US7383237B2; WO2013030442A1; EP1170241B2

Designated contracting state (EPC)
AT CH DE FR GB LI

DOCDB simple family (publication)
EP 0663366 A1 19950719; EP 0663366 B1 19990804; AT E182856 T1 19990815; BR 9500056 A 19951107; CA 2139704 A1 19950713; CA 2139704 C 20050426; CZ 6695 A3 19950913; DE 69419891 D1 19990909; DE 69419891 T2 20000309; FI 946148 A0 19941229; FI 946148 A 19950713; JP 3734287 B2 20060111; JP H07215606 A 19950815

DOCDB simple family (application)
EP 94120379 A 19941222; AT 94120379 T 19941222; BR 9500056 A 19950110; CA 2139704 A 19950106; CZ 6695 A 19950110; DE 69419891 T 19941222; FI 946148 A 19941229; JP 344595 A 19950112