

Title (en)

DISTRIBUTED NETWORK CONTROL OF A DIMMABLE FLUORESCENT LIGHTING SYSTEM

Title (de)

VERTEILTE NETZSTEUERUNG IN EINER DIMMBAREN LEUCHTSTOFFLAMPENBELEUCHTUNGSANORDNUNG

Title (fr)

COMMANDE A RESEAU REPARTI POUR UN SYSTEME D'ECLAIRAGE FLUORESCENT A INTENSITE REGLABLE

Publication

**EP 0940061 A4 20010307 (EN)**

Application

**EP 97926443 A 19970513**

Priority

- US 9707934 W 19970513
- US 1727996 P 19960513

Abstract (en)

[origin: WO9743876A1] An ergonomic and energy-saving dimmable fluorescent lighting system using a distributed network (138) of lighting controls and control power sources. A plurality of controls (84) share a proportional-response control line (58) with a default value, wherein the control requesting the largest deviation from the default value prevails. Certain controls (124) may additionally share a polling line (126), in which the controls must agree on a value, before it can be requested on the proportional-response control line. Interactions between controls on the network provide for a method to control the total illumination on a scene, including both artificial (94) and natural (96) light, down to the light level where only natural light (96) is present. Unidirectional control nodes (86) allow a first network to exert control on a second network, without affecting the control levels in the first network. Thereby, hierarchical network control can be established. In addition, the method provides for network power to energize the control network (63), derived either from the lighting ballasts (52) or from external network-compliant power sources (192) strategically located in the network. A self-energizing contactor (80) switches power to the lighting system (56).

IPC 1-7

**H05B 37/02**

IPC 8 full level

**H05B 41/39** (2006.01); **H05B 41/36** (2006.01); **H05B 41/392** (2006.01)

CPC (source: EP KR)

**H05B 41/36** (2013.01 - EP); **H05B 41/39** (2013.01 - KR); **H05B 41/3922** (2013.01 - EP)

Citation (search report)

- [A] EP 0481550 A1 19920422 - PHILIPS NV [NL]
- [A] US 5402101 A 19950328 - BERGER HORST [DE], et al

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US11038413B2; US8436541B2; US11431249B2; US8214061B2

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