

Title (en)  
APPARATUS FOR AND METHOD OF TRANSMITTING AND RECEIVING DATA OVER A LOW VOLTAGE POWER DISTRIBUTION SYSTEM

Title (de)  
VORRICHTUNG UND VERFAHREN ZUM SENDEN UND EMPFANGEN VON DATEN ÜBER EINE NIEDERSPANNUNGSVERTEILUNG

Title (fr)  
APPAREIL ET PROCEDE DE TRANSMISSION ET RECEPTION DE DONNEES PAR UN SYSTEME D'ALIMENTAION A TENSION BASSE

Publication  
**EP 1062845 A1 20001227 (EN)**

Application  
**EP 99910486 A 19990315**

Priority  
• GB 9900759 W 19990315  
• GB 9805431 A 19980313

Abstract (en)  
[origin: GB2335334A] The apparatus comprises a control unit 14 for disconnecting a low voltage power supply 10 from a power track 16 during a portion of the supply voltage waveform e.g. around zero-crossings, switches 22 for disconnecting the loads 32 and circuits 40, 42 and 14 for transmitting data over track 16 while the power and loads 32 are disconnected. The power supply and the loads are disconnected to overcome signal attenuation due to low track impedance and to present a constant load during signal transmission. Sensors 40, 42 detecting any of heat, movement, infrared, sound, light, temperature or voice transmit signals over the track to the control unit 14 including a microprocessor and control signals may be selectively sent from the unit 14 for individual control of brightness of lamps 32. Each interface unit 30 may have an individual i.d. and the transmitted message may include a checksum for error detection.

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**H05B 37/02**; **H04B 3/54**; **H02J 13/00**

IPC 8 full level  
**H02J 13/00** (2006.01); **H04B 3/54** (2006.01); **H05B 37/02** (2006.01)

CPC (source: EP US)  
**H02J 13/00002** (2020.01 - EP); **H02J 13/0001** (2020.01 - EP); **H04B 3/54** (2013.01 - EP US); **H05B 47/10** (2020.01 - EP US); **H05B 47/185** (2020.01 - EP US); **H04B 2203/542** (2013.01 - EP); **H04B 2203/5425** (2013.01 - EP); **H04B 2203/5458** (2013.01 - EP); **H04B 2203/5495** (2013.01 - EP); **H05B 47/165** (2020.01 - EP US); **Y02B 90/20** (2013.01 - EP); **Y04S 10/52** (2013.01 - EP); **Y04S 40/121** (2013.01 - EP)

Citation (search report)  
See references of WO 9948340A1

Cited by  
CN110915143A; US11239666B2

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**GB 2335334 A 19990915**; **GB 2335334 B 20010328**; **GB 9805431 D0 19980506**; EP 1062845 A1 20001227; WO 9948340 A1 19990923

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