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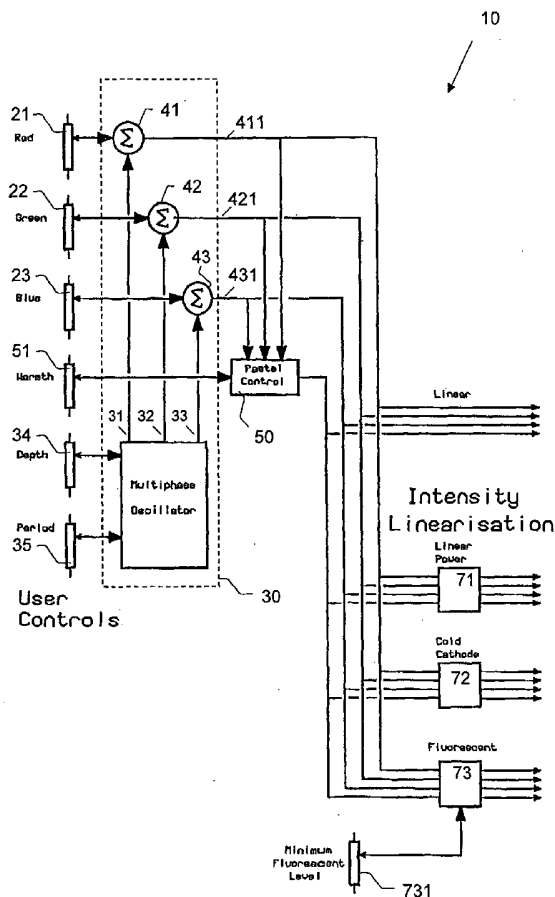
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[Continued on next page]

(54) Title: LIGHTING CONTROL APPARATUS



(57) Abstract: A lighting control apparatus (10) has at least one luminous flux control (21, 22, 23) for setting a predetermined luminous flux of at least one coloured light channel. A modulator (30) cyclically modulates the predetermined luminous flux using at least one of a predetermined cyclic period, a predetermined waveform and a predetermined modulation amplitude. Colour saturation and illumination level control may also be provided. Preferably the apparatus controls both DMX-enabled lights and non-DMX-enabled lights.



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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(88) Date of publication of the international search report:

11 March 2004

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 03/02440

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H05B37/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 530 322 A (FERENCE JONATHAN H ET AL) 25 June 1996 (1996-06-25) column 6, line 66 -column 10, line 23 ---	1-14
X	US 5 990 635 A (LOAR JOHN F ET AL) 23 November 1999 (1999-11-23) column 6, line 66 -column 10, line 25 ---	1-14
X	US 6 175 771 B1 (HUNT MARK A ET AL) 16 January 2001 (2001-01-16) column 3, line 1 -column 5, line 31 ---	1-14
X	US 6 384 545 B1 (LAU EE THEOW) 7 May 2002 (2002-05-07) column 2, line 19 -column 3, line 49 --- -/--	1-14

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

8 September 2003

Date of mailing of the international search report

02.01.04

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 03/02440

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No. .
A	FR 2 741 229 A (BRUN PIERRE) 16 May 1997 (1997-05-16) the whole document -----	1-14

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 03/02440

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-14

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-14

Lighting control apparatus with channel and modulation means.

2. Claims: 15-16

Lighting control apparatus with predetermined colour saturation means and luminous flux vector processing means.

3. Claims: 17-18

Lighting control apparatus with constant illumination level control.

4. Claims: 19-20

Lighting control apparatus with digital multiplex interface.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/GB 03/02440

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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