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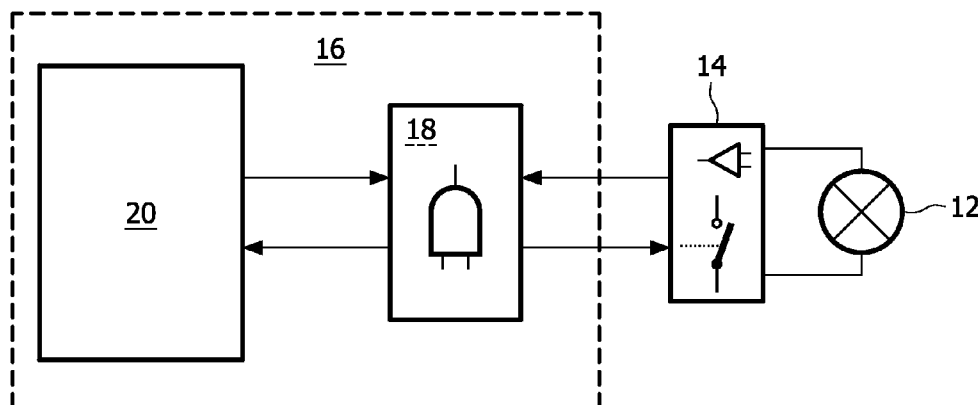
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- (71) Applicant (for DE only): PHILIPS INTELLECTUAL
PROPERTY & STANDARDS GMBH [DE/DE];
Lübeckertordamm 5, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except US): KONIN-
KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LÜRKENS, Peter
[DE/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL). SCHEEL, Thomas [DE/NL]; c/o Prof. Holstlaan
6, NL-5656 AA Eindhoven (NL). HATTRUP, Christian
[DE/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven
(NL).
- (74) Agent: ROLFES, Johannes G.A.; Prof. Holstlaan 6,
NL-5656 AA Eindhoven, (NL).

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(54) Title: BINARY CONTROLLER AND POWER SUPPLY WITH A BINARY CONTROLLER



(57) Abstract: A controller is described, which is particularly suited for a power supply with switching elements (S1, S2), such as a switching mode power supply. The controller comprises a logical unit (18) which calculates a binary state value Z_k by a first logical operation from a binary input value I and a prior binary state value Z_{k-1} . The logical unit further calculates a binary output value Y by a second logical operation from the binary input value I and the binary state value Z_k . In this way, fast and efficient fully digital control may be realized especially for a switching mode power supply, where the binary input value I is a comparator value and the binary output value Y is used to drive the switch elements (S1, S2). An adaptation unit (20), which may be a signal processor, determines the logical operations and delivers them to the logical unit (18) during operation of the controller unit (16).

WO 2008/012714 A3

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/156632 A1 (SANDBOTE SAM B [US] ET AL) 21 July 2005 (2005-07-21)	1-4, 6, 7, 15
Y	page 3, paragraph 33 - page 4, paragraph 48; claim 1; figures 1-8	5, 8-14
Y	----- US 5 629 610 A (PEDRAZZINI GIORGIO [IT] ET AL) 13 May 1997 (1997-05-13) cited in the application column 1, lines 14-34; figures 1-4 column 2, lines 1-63	5, 8-14
X	----- US 2006/022656 A1 (LEUNG KAFAI [US] ET AL) 2 February 2006 (2006-02-02) page 4, paragraph 85 - page 5, paragraph 89; figures 1, 2, 4, 9, 34-37 page 16, paragraph 157 - page 23, paragraph 194	1-15
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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