SYSTEM AND METHOD FOR DETERMINING VOLTAGE LEVELS

A method for determining a power source voltage level of a power source in a system in which the power source is connected to a microcontroller. A charging circuit is in direct communication with a pin of the microcontroller and the power source voltage level is determined by charging the charging circuit using a constant voltage level and determining a time when the charging circuit attains a voltage level sufficient to transition the pin of the microcontroller from a state corresponding to a logic "0" to a state corresponding to a logic "1." The determined time and a predetermined relationship between the power source voltage level and an input port transition voltage value of the microcontroller is then used to determine the power source voltage level of the power source.
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.

(88) Date of publication of the international search report:
25 November 2004
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/10792

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) ~ G01R 19/00
US CL : 702/64
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)
U.S. : 702/64,63,65,57,60,104; 324/433,713; 320/155; 714/724

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

Further documents are listed in the continuation of Box C.

See patent family annex.

Date of the actual completion of the international search
27 August 2004 (27.08.2004)

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Form PCT/ISA/210 (second sheet) (January 2004)
Continuation of B. FIELDS SEARCHED Item 3:
USPAT, USPGPUB, EPO, JPO, DERWENT, IBM_TDB search notes: (power near source) same voltage, (power near source) same voltage and microcontroller, 999power near source) same voltage and microcontroller) and (constant near voltage)