## **PCT**



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 4:

G06F 3/02

(11) International Publication Number:

WO 88/09007

**A1** 

(43) International Publication Date:

17 November 1988 (17.11.88)

(21) International Application Number:

PCT/GB88/00360

(22) International Filing Date:

9 May 1988 (09.05.88)

(31) Priority Application Number:

8710917

(32) Priority Date:

8 May 1987 (08.05.87)

(33) Priority Country:

GB

(71) Applicant (for all designated States except US): CAM-BRIDGE COMPUTER LIMITED [GB/GB]; Sidney House, Sussex Street, Cambridge CB1 1PA (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MILLER, Richard, Gustav [GB/GB]; 31 Hare Lane, Claygate, Esher, Surrey (GB). WESTWOOD, James, Saint Valentine [GB/GB]; 9 Landbeach Road, Milton, Cambridge CB4 4DA (GB).

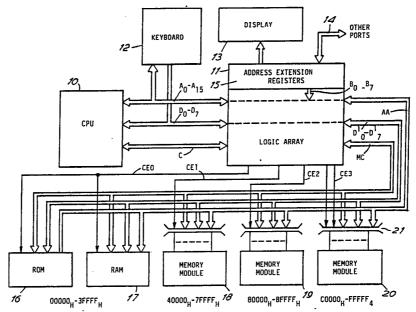
(74) Agent: PEARS, David, Ashley; Reddie & Grose, 16 Theobalds Road, London WC1X 8PL (GB).

(81) Designated States: AT (European patent), BE (European patent), CH (European patent), DE (European patent), FR (European patent), GB (European patent), IT (European patent), JP, LU (European patent), NL (European patent), SE (European patent), US

Published

With international search report.

(54) Title: IMPROVEMENTS IN DIGITAL COMPUTERS



(57) Abstract

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A battery portable computer comprises a CPU (10), logic array (11), RAM (17) and ROM (16) and peripheral devices - keyboard (12), display (13), plug-in memory modules (18, 19, 20) and other ports (14). In order to avoid pin-limitation constraints on the logic array (11) some operations are handled without dedicated ports. The keyboard (12) has a matrix connected directly across data and address lines but so as effectively not to load these lines during normal CPU clock cycles. When the keyboard is to be serviced, the CPU clock is stopped for long enough to allow a data line ( $D_0$ - $D_7$ ) to be driven low by a walking bit on an address line ( $A_8$ - $A_{15}$ ) when the key-switch at the intersection of the lines is closed. An EPROM (20) in a specific address space range (COOOO<sub>H</sub> - FFFF<sub>H</sub>) can be programmed by stopping the CPU clock long enough to provide the required programming voltage to the EPROM to write a byte on the data bus ( $D'_0$ - $D'_7$ ) therein. The CPU (10) is a CMOS device which does not lose data in its internal registers when its clock is stopped.