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[54] **PROGRAM MODIFICATION REGISTERS FOR NUMERICALLY CONTROLLED MACHINE TOOLS**

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[51] **Int. Cl.**[2] **G06F 15/46**

[52] **U.S. Cl.** **364/474**

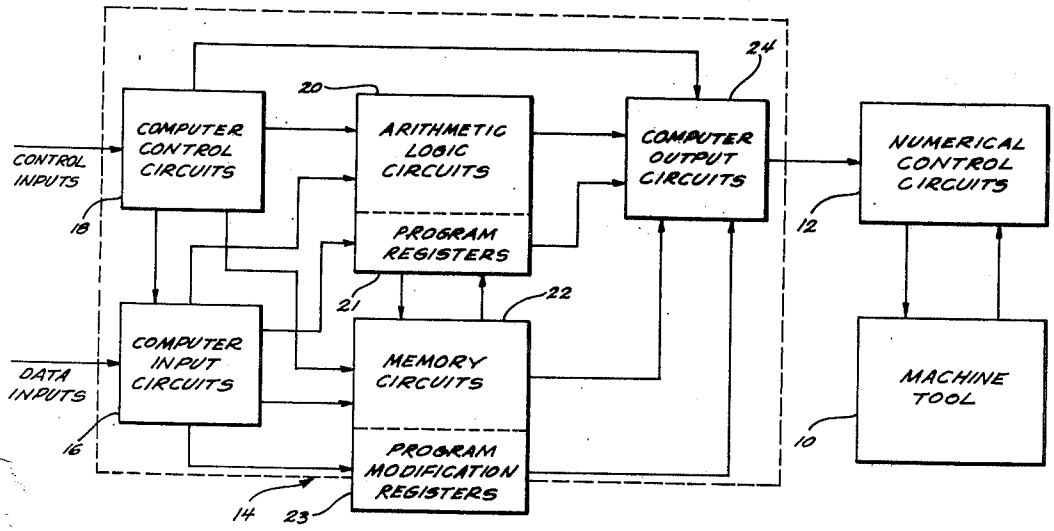
[57] **ABSTRACT**

By utilizing a set of program modification registers, a numerically controlled machining program can be written with loops and branches like a computer program. The order and action of the program blocks can be made dependent upon data contained in the program modification registers. The register data may be altered by the program as it runs or by external inputs to the control circuits.

2 Claims, 2 Sheets Drawing,

7 Pages Specification

The file of this unexamined application may be inspected and copies thereof may be purchased (849 O.G. 1221, Apr. 9, 1968).



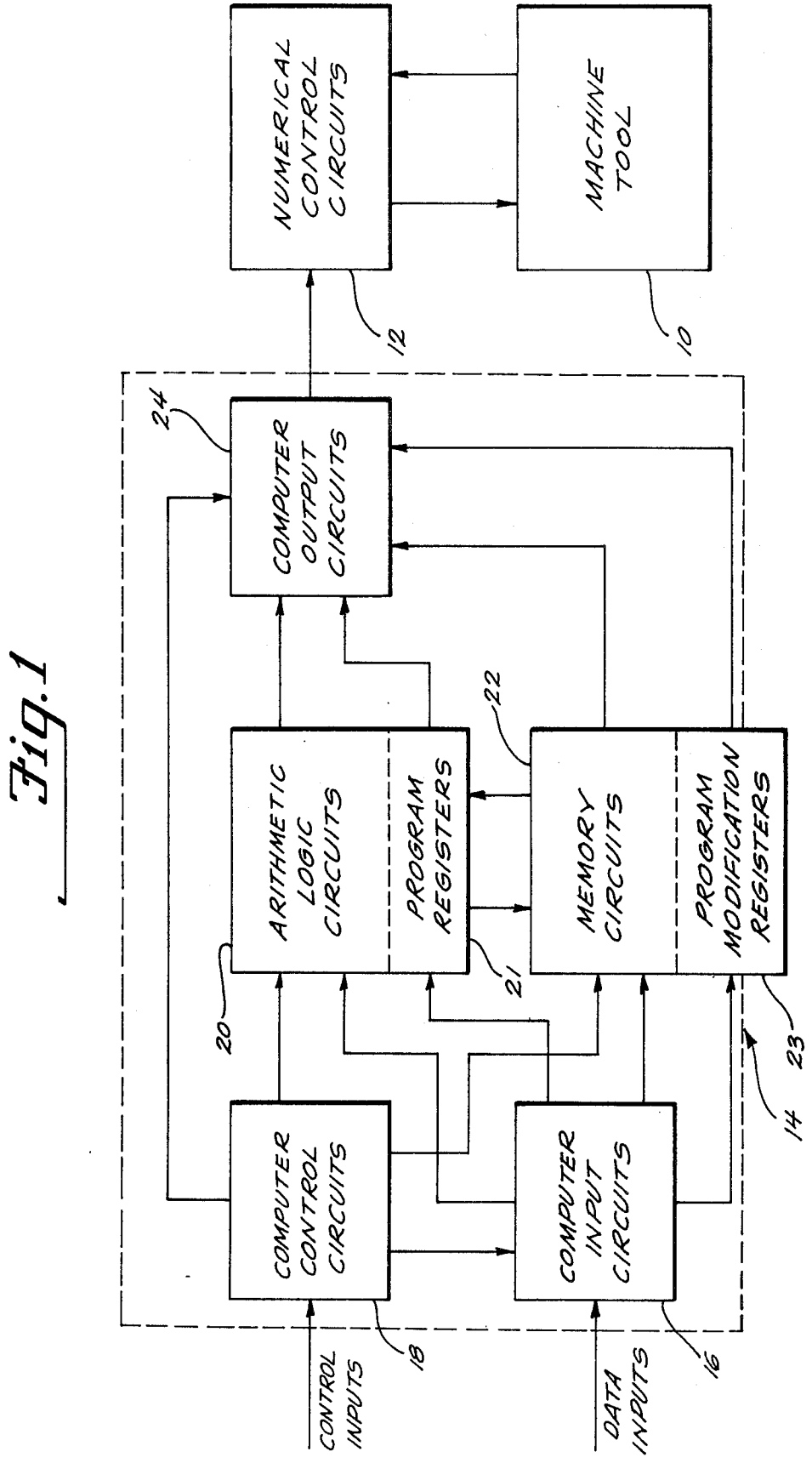

NUMERICAL CONTROL CIRCUITS
MACHINE TOOL
12
10
24
COMPUTER OUTPUT CIRCUITS
22
ARITHMETIC LOGIC CIRCUITS
PROGRAM REGISTERS
MEMORY CIRCUITS
PROGRAM MODIFICATION REGISTERS
20
21
23
14
COMPUTER CONTROL CIRCUITS
COMPUTER INPUT CIRCUITS
CONTROL INPUTS
DATA INPUTS
18
16

Fig. 1

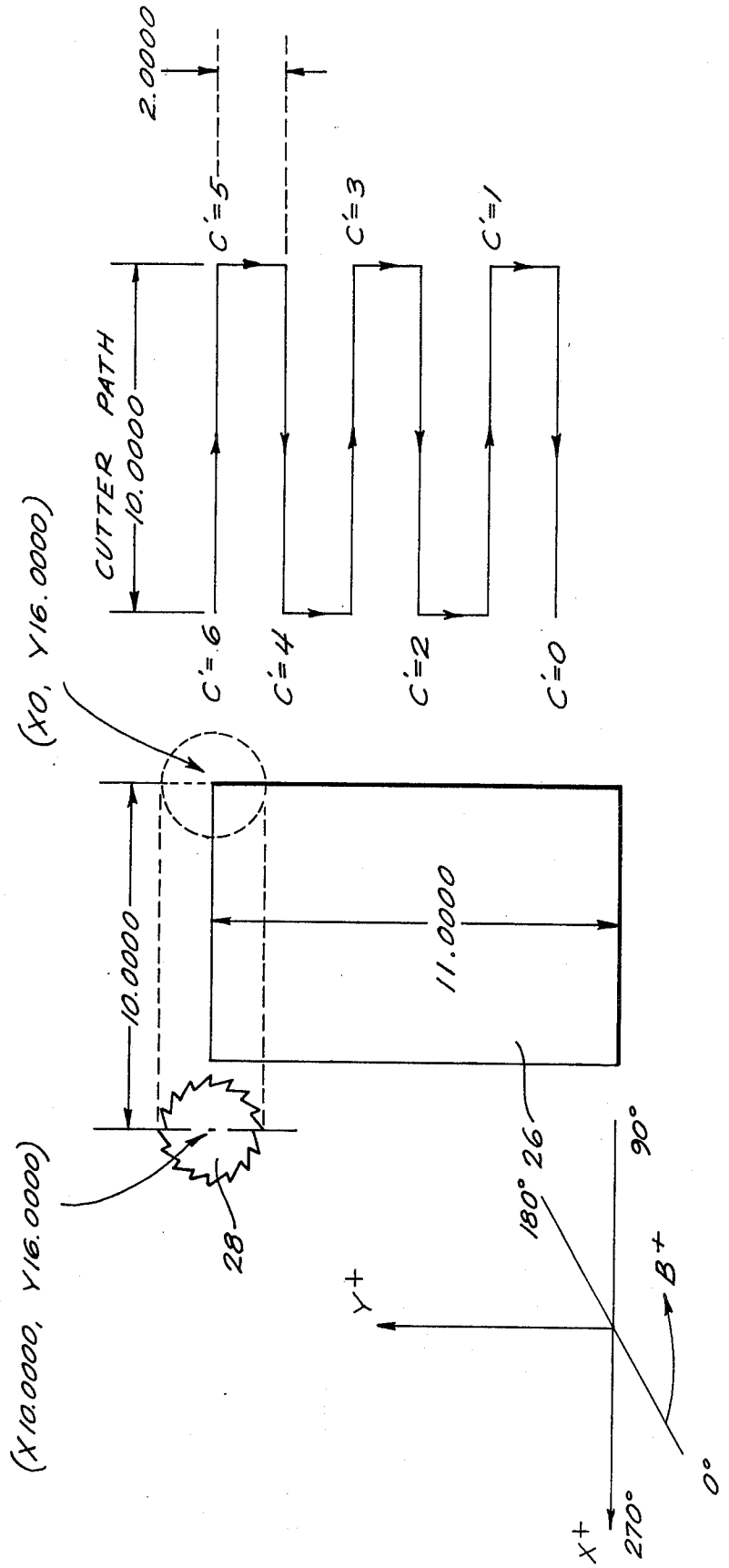

2.0000
C'=5
C'=3
C'=1
CUTTER PATH
10.0000
C'=6
C'=4
C'=2
C'=0
(X0, Y16.0000)
10.0000
11.0000
(X10.0000, Y16.0000)
28
26
180°
90°
B+
Y+
0°
270°
X+

Fig. 2