

[54] METHOD AND APPARATUS FOR MODIFICATION OF A PRERECORDED PROGRAMMED SEQUENCE OF MOTIONS DURING EXECUTION THEREOF BY A ROBOT

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[52] U.S. Cl. 364/513; 318/568; 364/193; 901/3; 901/7; 901/43

[58] Field of Search 364/513, 474, 478, 171, 364/188, 189, 146, 147, 191, 192, 193; 318/568; 414/730, 744; 239/69, 70; 901/2-5, 7, 41-43

[56] References Cited

U.S. PATENT DOCUMENTS

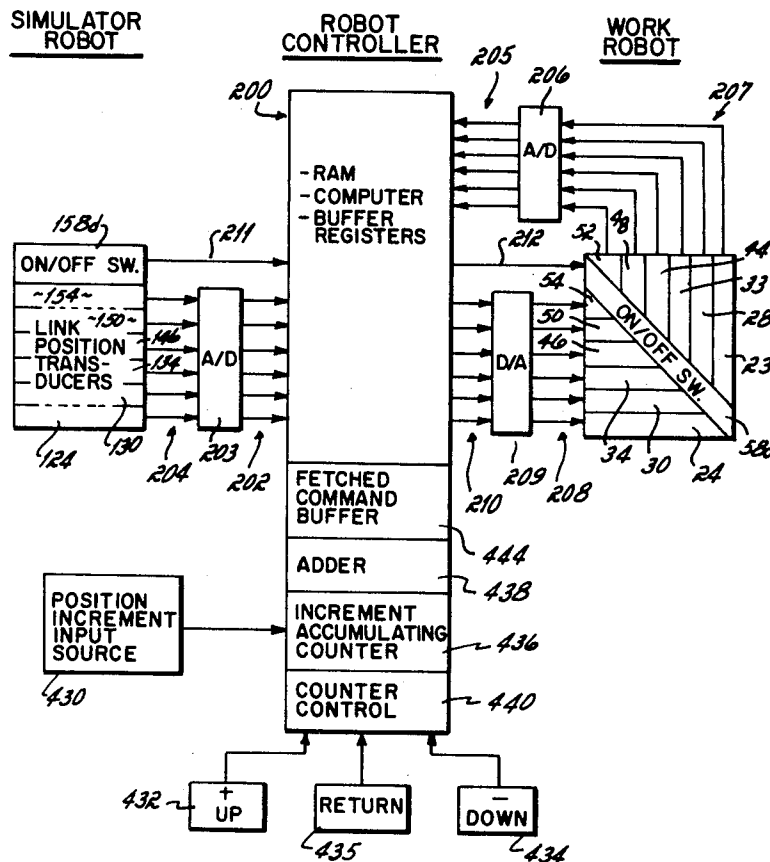
3,971,000	7/1976	Cromwell	364/189 X
4,021,651	5/1977	Mitsuhashi et al. .	
4,025,838	5/1977	Watanabe .	
4,132,938	1/1979	Sano et al. .	
4,140,953	2/1979	Dunne .	
4,409,649	10/1983	Heeger	364/144

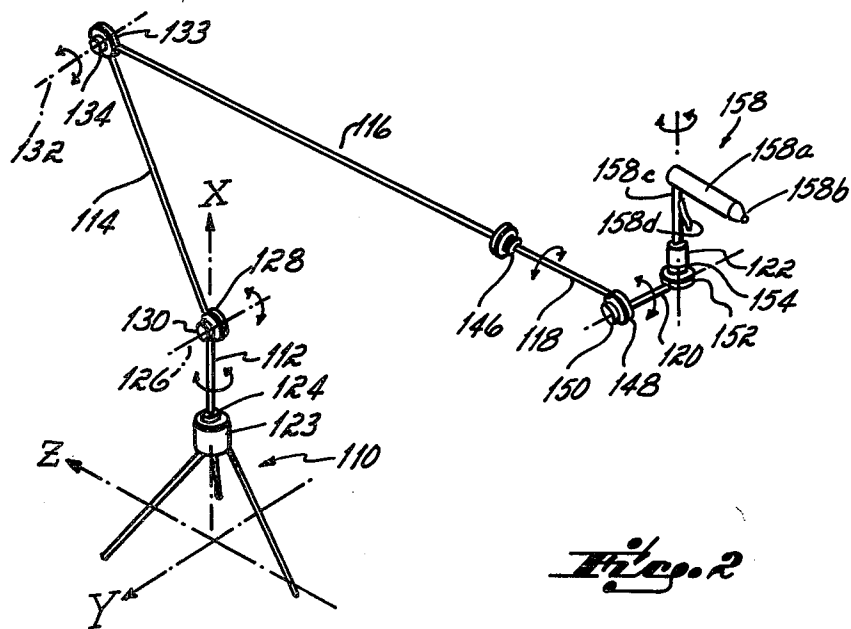
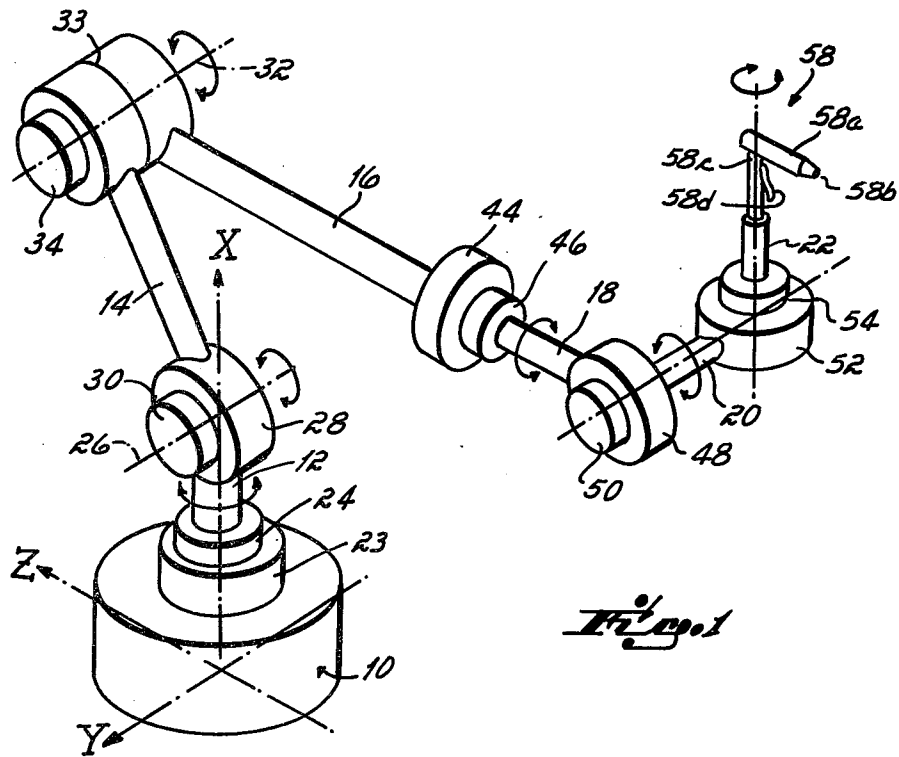
Primary Examiner—Joseph F. Ruggiero
Attorney, Agent, or Firm—Wood, Herron & Evans

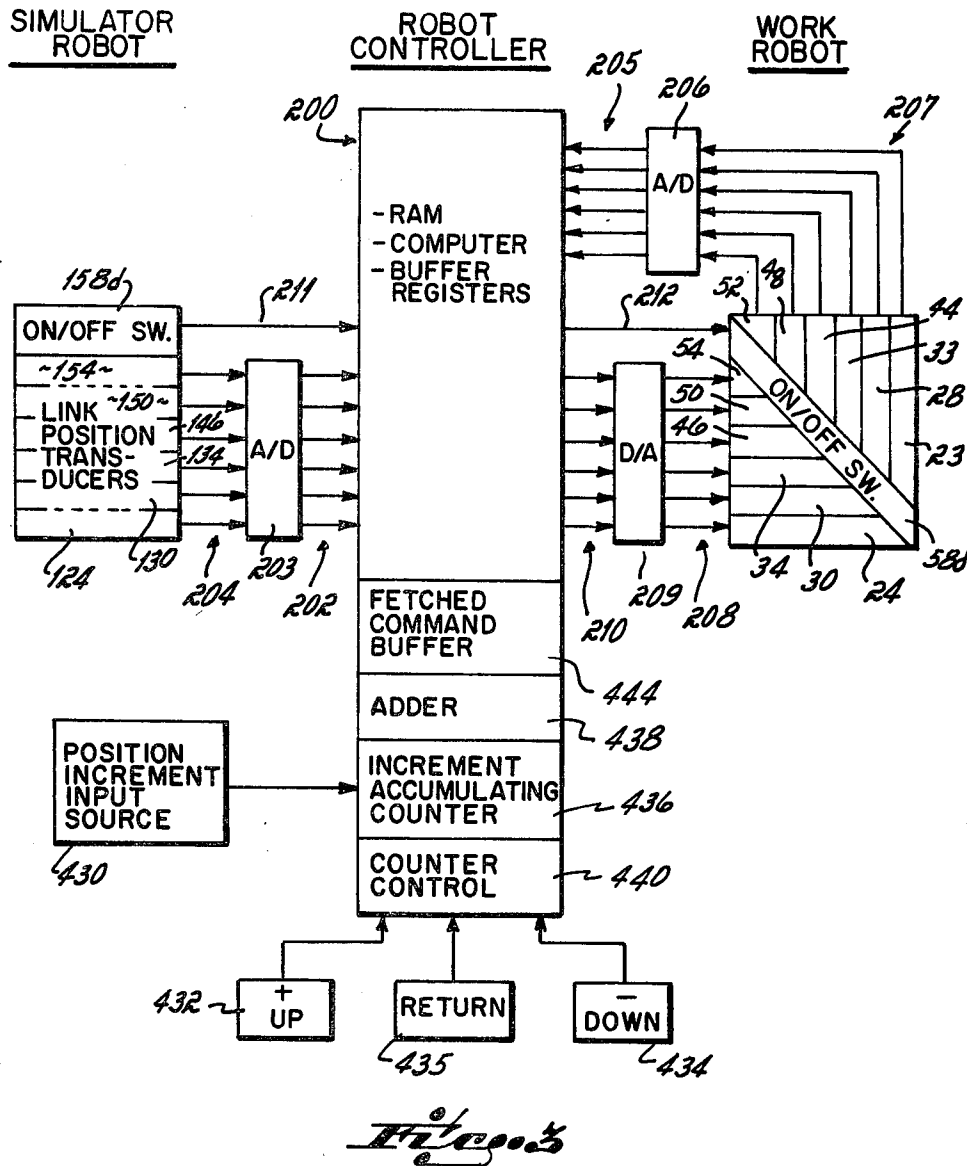
[57] ABSTRACT

A method and apparatus for real time editing, or modifying, of a program of prerecorded robot motions stored in a robot controlled memory while it is being processed by the controller for subsequent storage of the program, as edited, in memory and output to the robot for execution.

14 Claims, 10 Drawing Figures







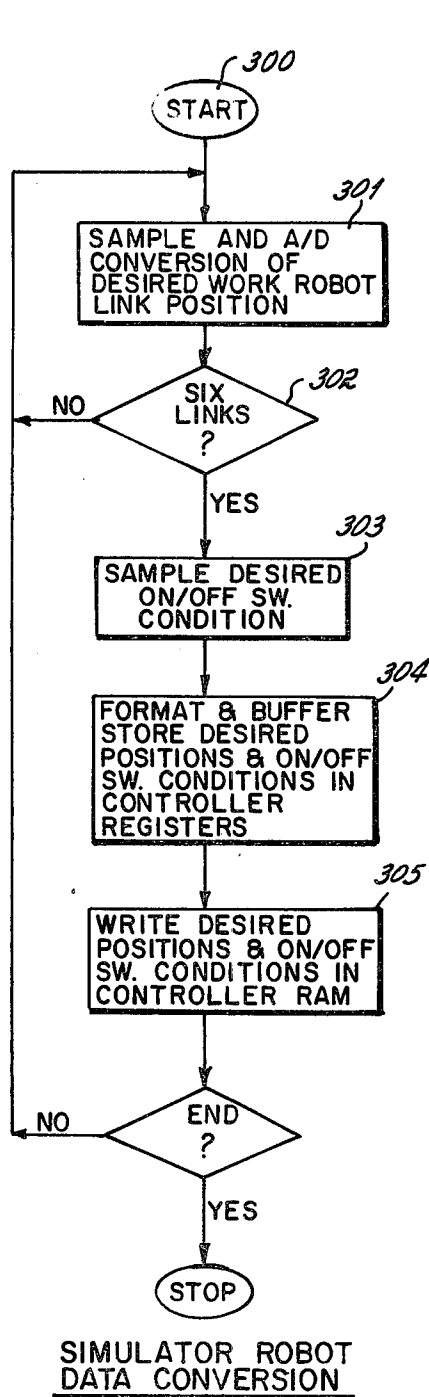


Fig. 4a

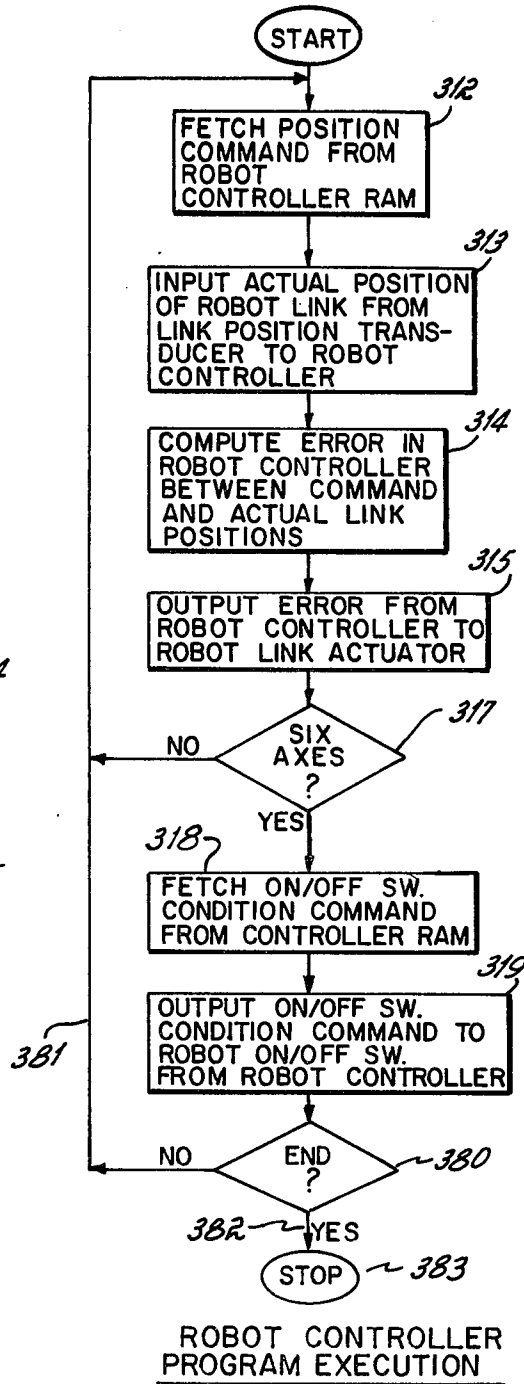
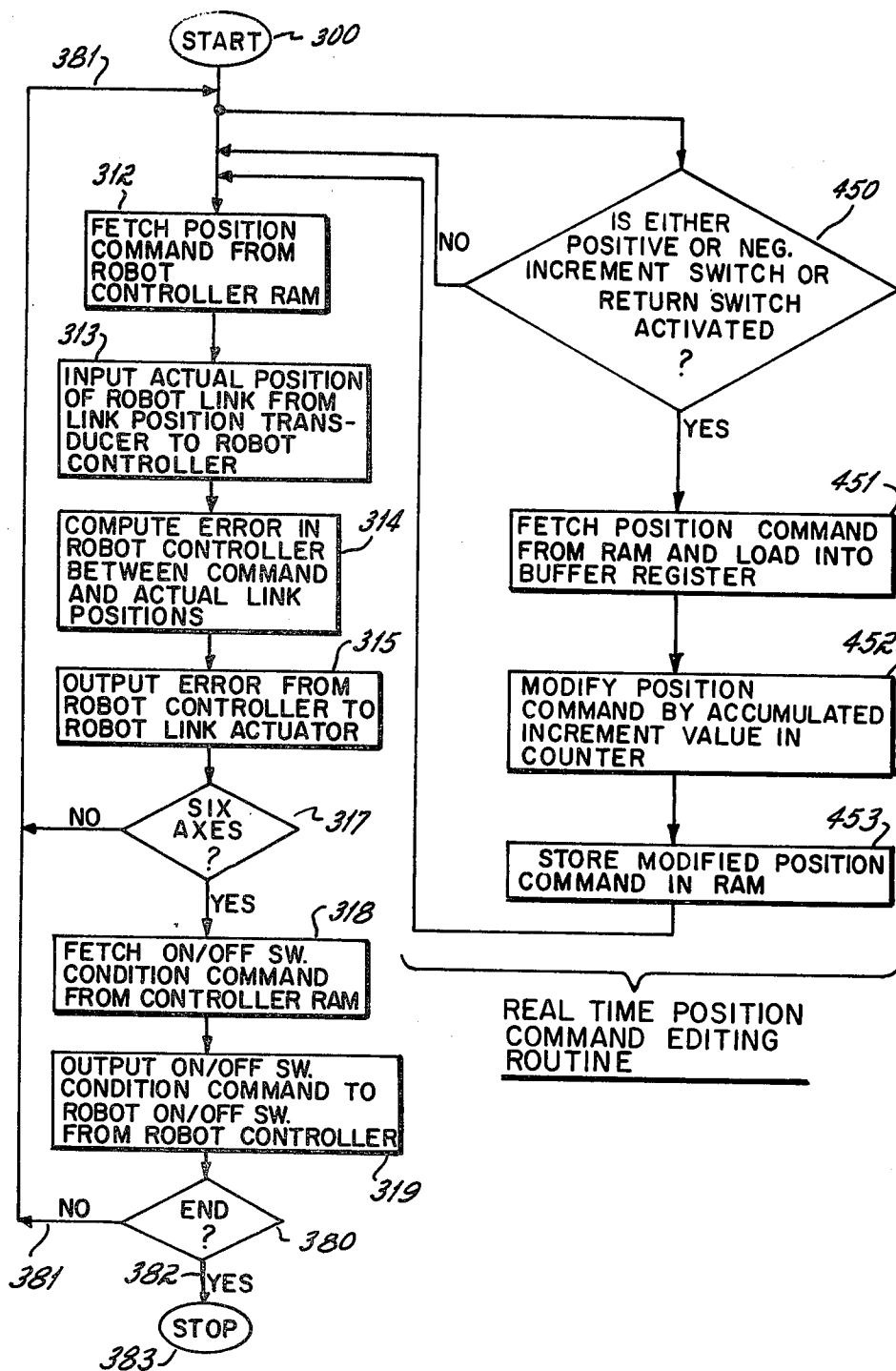


Fig. 4b



ROBOT CONTROLLER PROGRAM
EXECUTION WITH POSITION COMMAND EDITING

Fig. 5a

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