

[72] Inventor **Arnold P. Grunwald**
Chicago, Ill.
[21] Appl. No. **874,734**
[22] Filed **Nov. 7, 1969**
[45] Patented **Nov. 30, 1971**
[73] Assignee **The United States of America as**
represented by the United States Atomic
Energy Commission

2,453,239	11/1948	Luhn	235/61.12 X
3,289,327	12/1966	Chevillon	197/6.1
3,230,644	1/1966	Irazoqui	35/35 A
3,260,340	7/1966	Locklar et al.	197/20 X
2,891,736	6/1959	Blaes	242/192
3,395,247	7/1968	Fieldgate	35/35 A

Primary Examiner—Robert E. Pulfrey
Assistant Examiner—R. T. Rader
Attorney—Roland A. Anderson

[54] **READING AND WRITING MACHINE USING
RAISED PATTERNS**
6 Claims, 7 Drawing Figs.

[52] U.S. Cl. **197/6.1,**
35/35 A, 178/17 A, 178/30, 235/61.12, 242/192,
242/200
[51] Int. Cl. **B41j 3/32,**
G09b 21/00
[50] Field of Search 197/6.1, 19;
35/35; 178/17 A, 30; 235/61.12; 242/192, 200

[56] **References Cited**
UNITED STATES PATENTS
2,521,338 9/1950 Bryce et al. 35/35 A

ABSTRACT: A reading and writing machine which uses raised patterns to convey information includes a reading belt upon which the patterns are formed and a tape which stores the information. The tape is divided into a plurality of different information portions which the machine can selectively read. Provision is made for writing on selected portions of the tape on blank tape. A simple tape drive mechanism is provided which prevents slack in the tape yet does not require a variable speed drive. The reading belt is formed of plastic with bubbles having two stable positions molded therein.

