

[54] **APERTURE SETTING DEVICE**
 [75] Inventor: **Masaoki Yasumi, Akigawa, Japan**
 [73] Assignee: **Japan Aviation Electronics Industry Limited, Tokyo, Japan**
 [21] Appl. No.: **361,649**
 [22] Filed: **Mar. 25, 1982**

3,859,728 1/1975 Shutt 33/180 R
 4,041,766 8/1977 Johnson et al. 29/753

FOREIGN PATENT DOCUMENTS

87474 1/1958 Netherlands 33/1 B

Primary Examiner—Richard R. Stearns
Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy

Related U.S. Application Data

[62] Division of Ser. No. 172,305, Jul. 25, 1980, abandoned.
 [51] **Int. Cl.³** **G01B 5/00; B23P 19/00**
 [52] **U.S. Cl.** **33/180 R; 29/751**
 [58] **Field of Search** **33/178 R, 180 R, 181 R, 33/DIG. 7; 29/751, 753**

References Cited

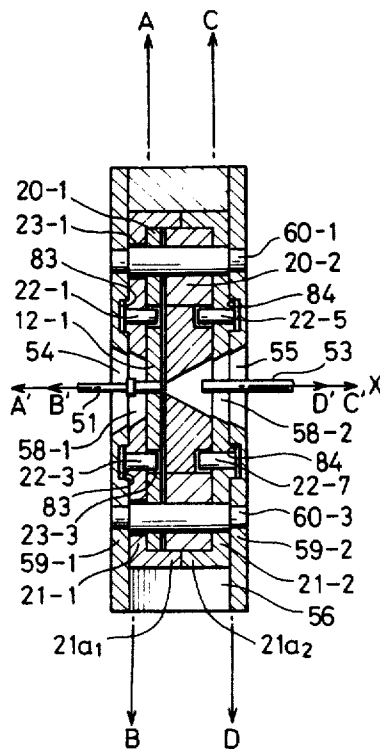
U.S. PATENT DOCUMENTS

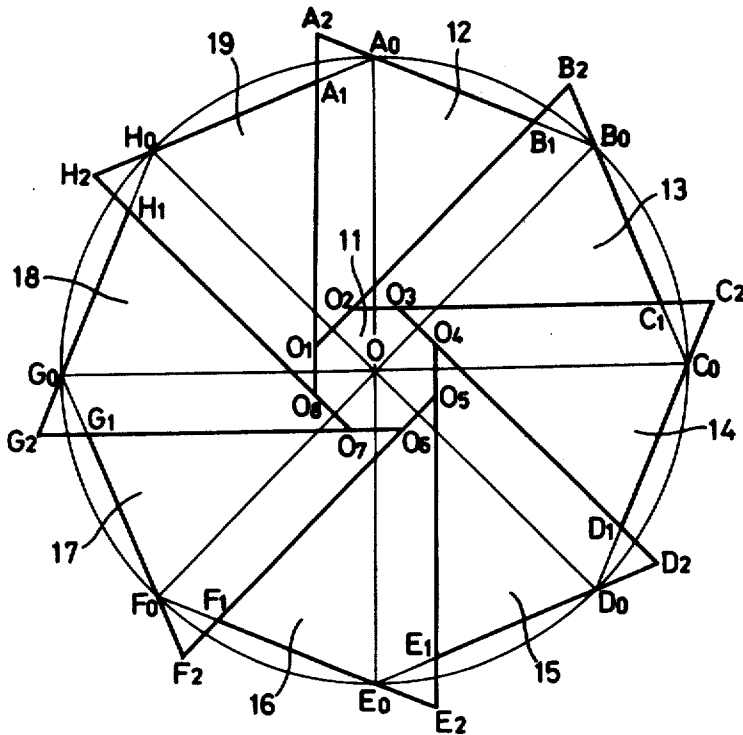
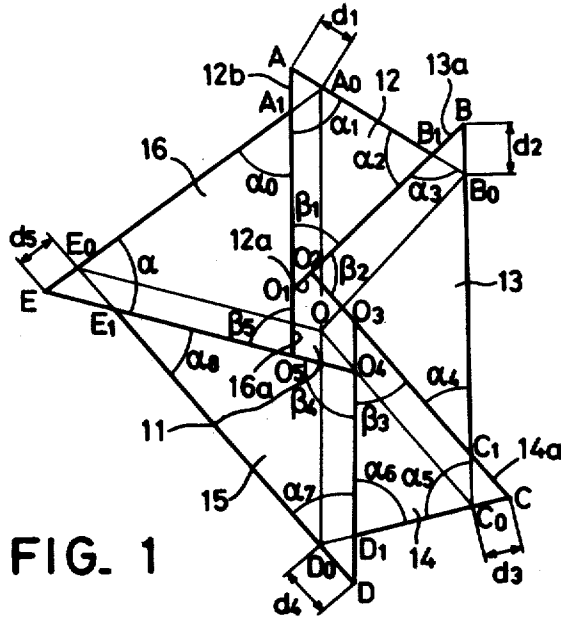
1,576,346 3/1926 Mendell 33/178 R
 1,878,296 9/1932 Schmidt et al. 33/180 R
 2,638,676 5/1953 Callahan 33/180 R
 2,827,941 3/1958 Stoltz 29/753
 3,325,885 6/1967 Ziegler, Jr. et al. 29/751

[57] **ABSTRACT**

An aperture setting device for use in a drawing die, a chuck and so forth, in which at least three or more substantially triangular movable pieces are sequentially arranged in the form of a ring, an aperture is formed by one end portion of an inner side of each movable piece and the movable piece is movable along a side opposite its vertical angle on the side of the aperture, together with the other movable pieces. The movable pieces are disposed in a frame. By the movement of the movable pieces, the aperture can be varied in size without being changed in configuration.

7 Claims, 18 Drawing Figures





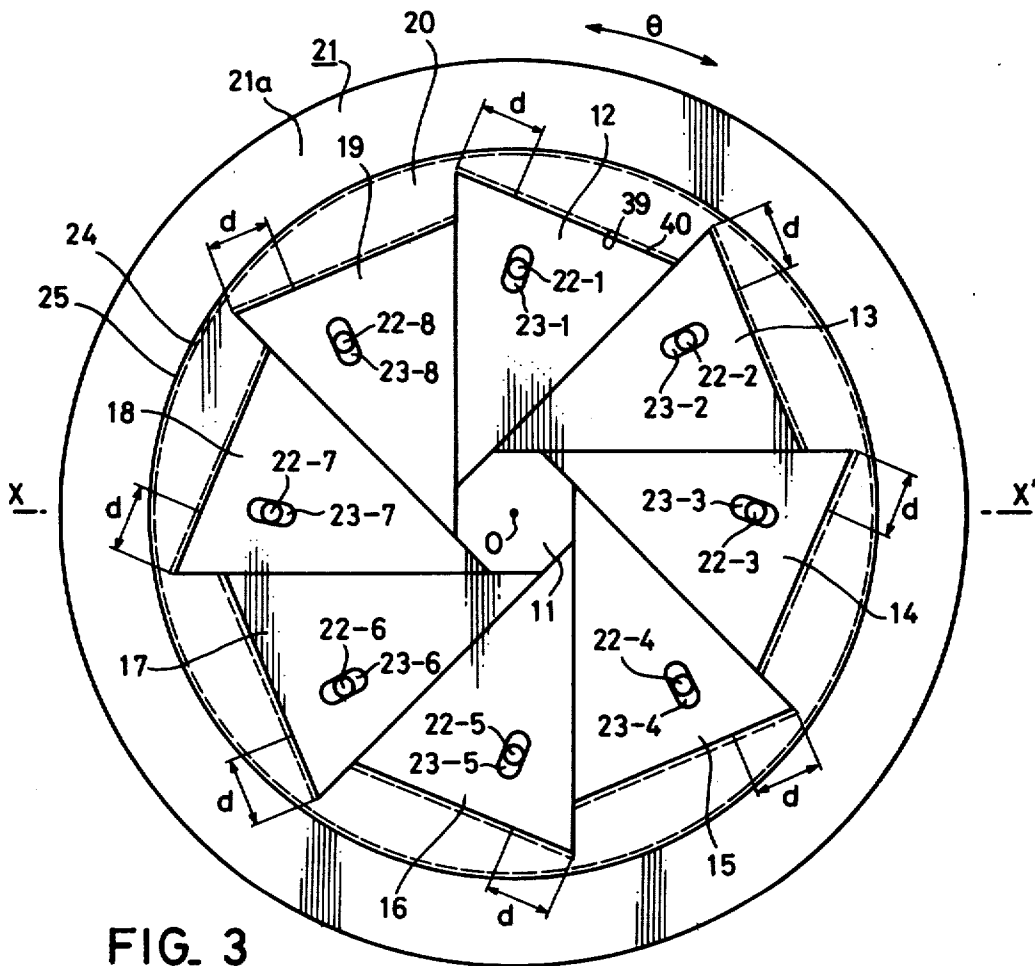


FIG. 3

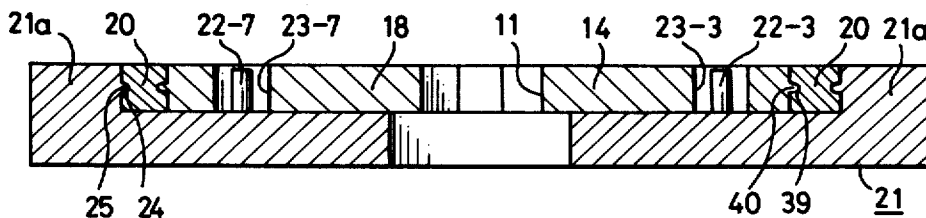


FIG. 10

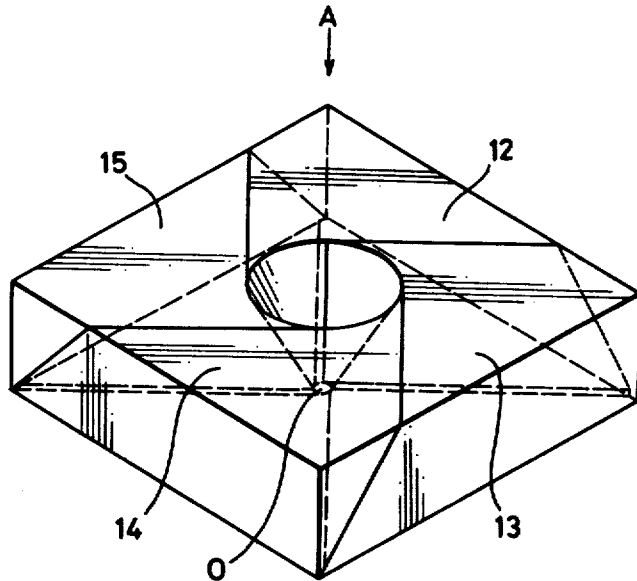


FIG. 4(a)

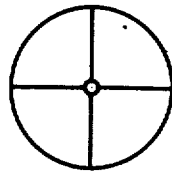


FIG. 4(b)

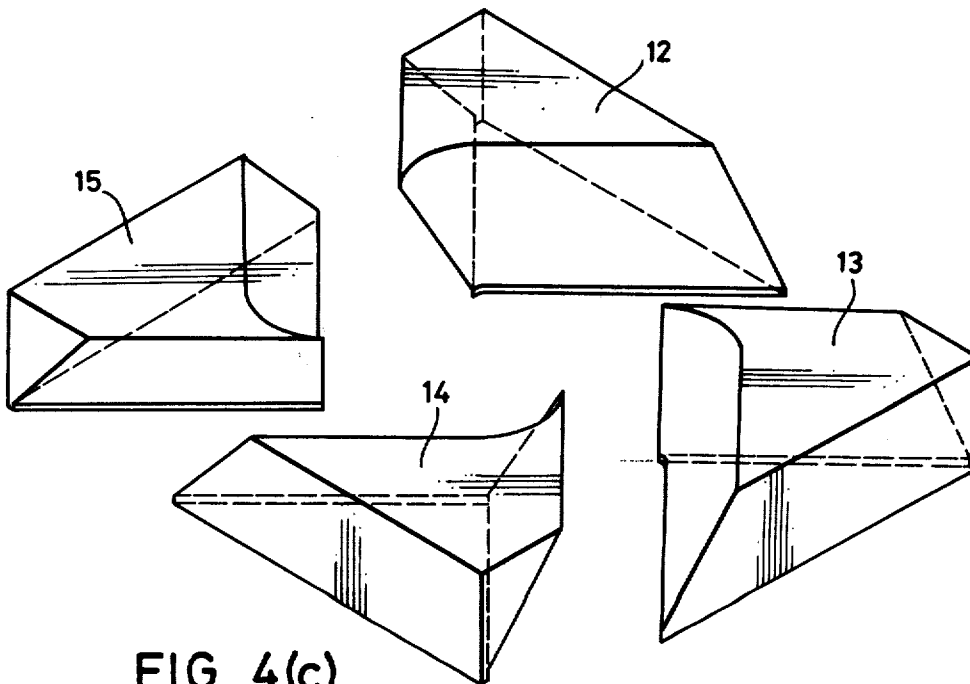


FIG. 4(c)

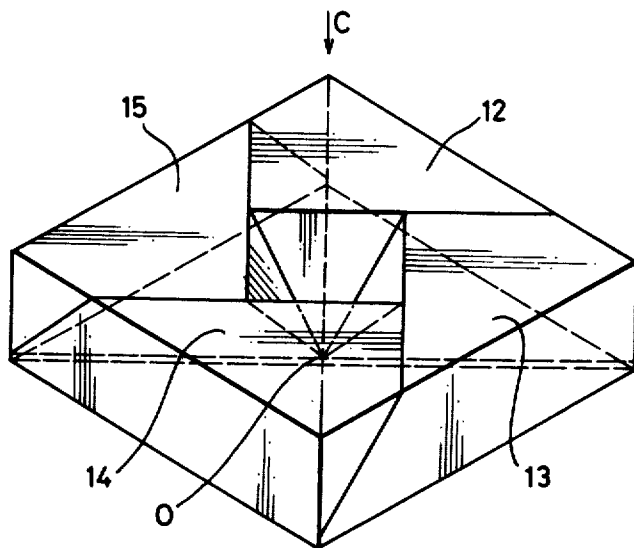


FIG. 5(a)

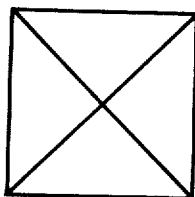


FIG. 5(b)

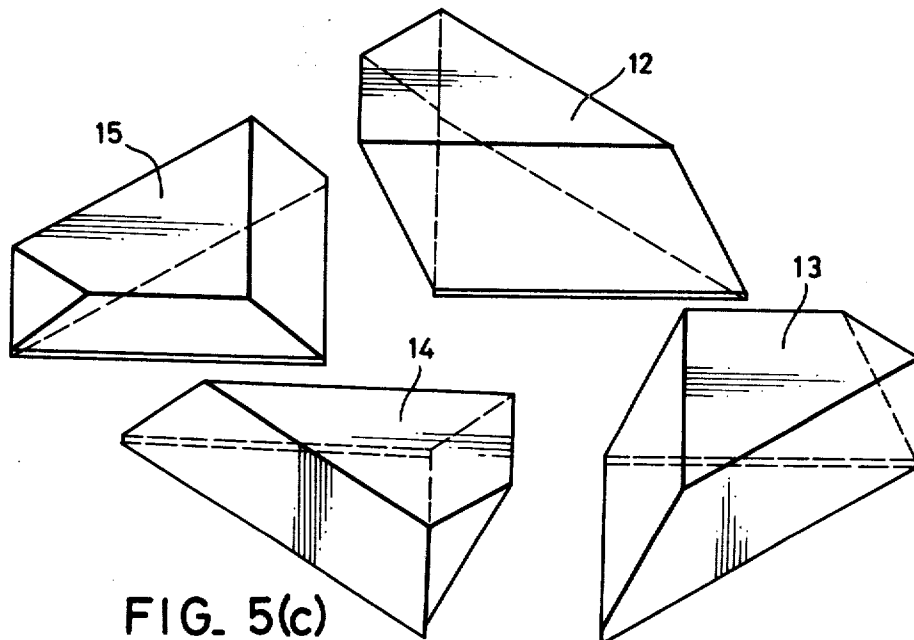


FIG. 5(c)

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.