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(12) **United States Design Patent**
Smith et al.

(10) **Patent No.:** **US D918,142 S**

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(54) **BLADELESS TURBINE IMPELLER**

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(**) Term: **15 Years**

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(51) **LOC (13) Cl.** **13-01**

(52) **U.S. Cl.**
USPC **D13/118**

(58) **Field of Classification Search**
USPC D13/112, 113, 118, 122, 173, 182, 184,
D13/199; D15/5, 7; D8/352, 354;
D23/249, 254
CPC . F01D 1/36; F01D 11/02; F16K 51/00; Y10T
137/2273; F04D 29/666; F04D 17/16;
F04D 17/161
See application file for complete search history.

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(57) **CLAIM**

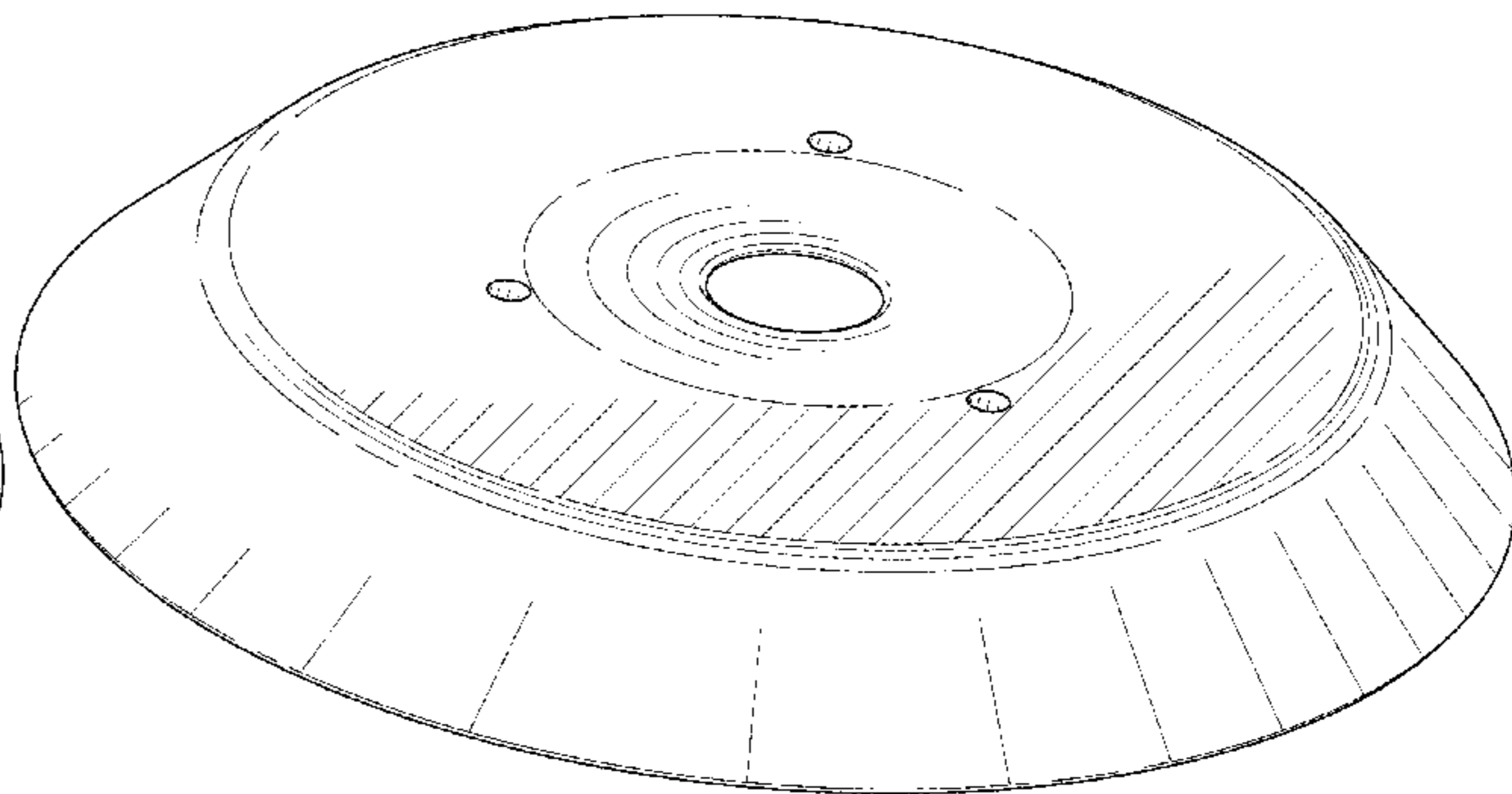
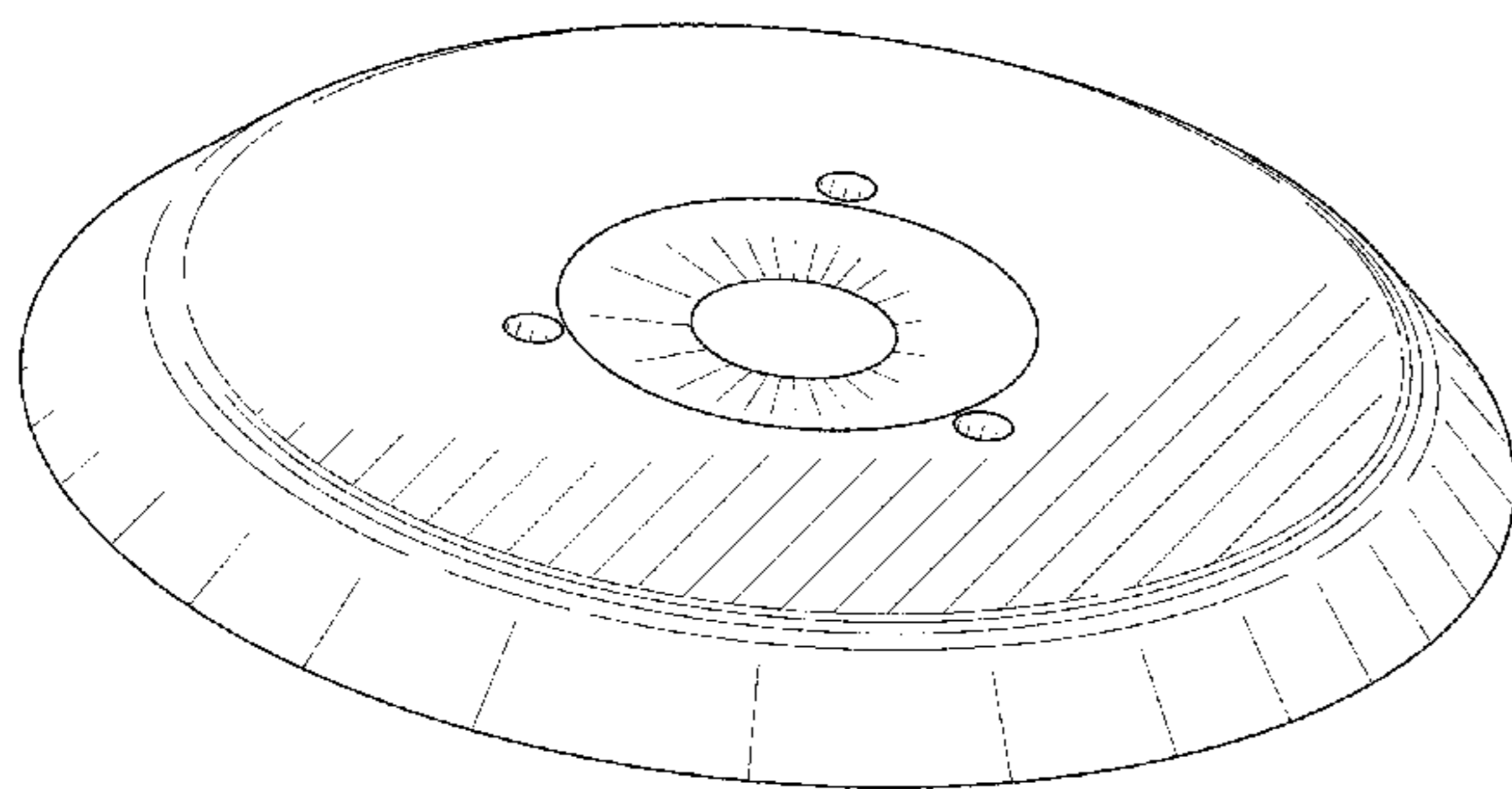
The ornamental design for a bladeless turbine impeller, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of a bladeless turbine impeller showing our new design; FIG. 2 is a top plan view thereof; FIG. 3 is a bottom plan view thereof; FIG. 4 is a front-side elevational view, the rear-side elevational view, the right-side elevational view and the left-side elevational view being identical; FIG. 5 is a cross-sectional view taken along line 5-5 of FIG. 2; FIG. 6 is a perspective view of a second embodiment of a bladeless turbine impeller showing our new design; FIG. 7 is a top plan view thereof; FIG. 8 is a bottom plan view thereof; FIG. 9 is a front-side elevational view, the rear-side elevational view, the right-side elevational view and the left-side elevational view being identical; and, FIG. 10 is a cross-sectional view taken along line 10-10 of FIG. 7.

The broken lines represent the designation lines for the cross-sectional views and form no part of the claimed design.

1 Claim, 6 Drawing Sheets



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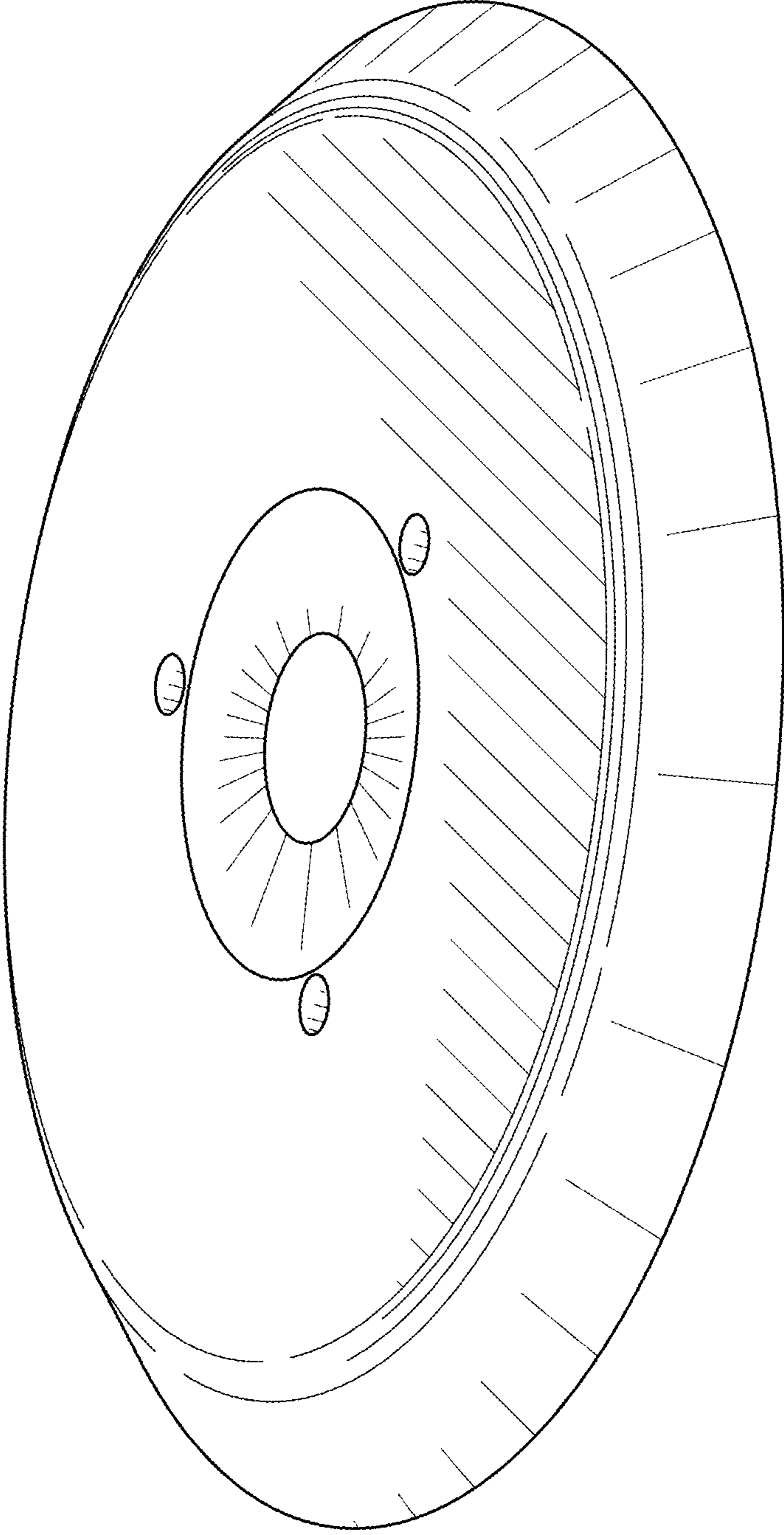


FIG. 1

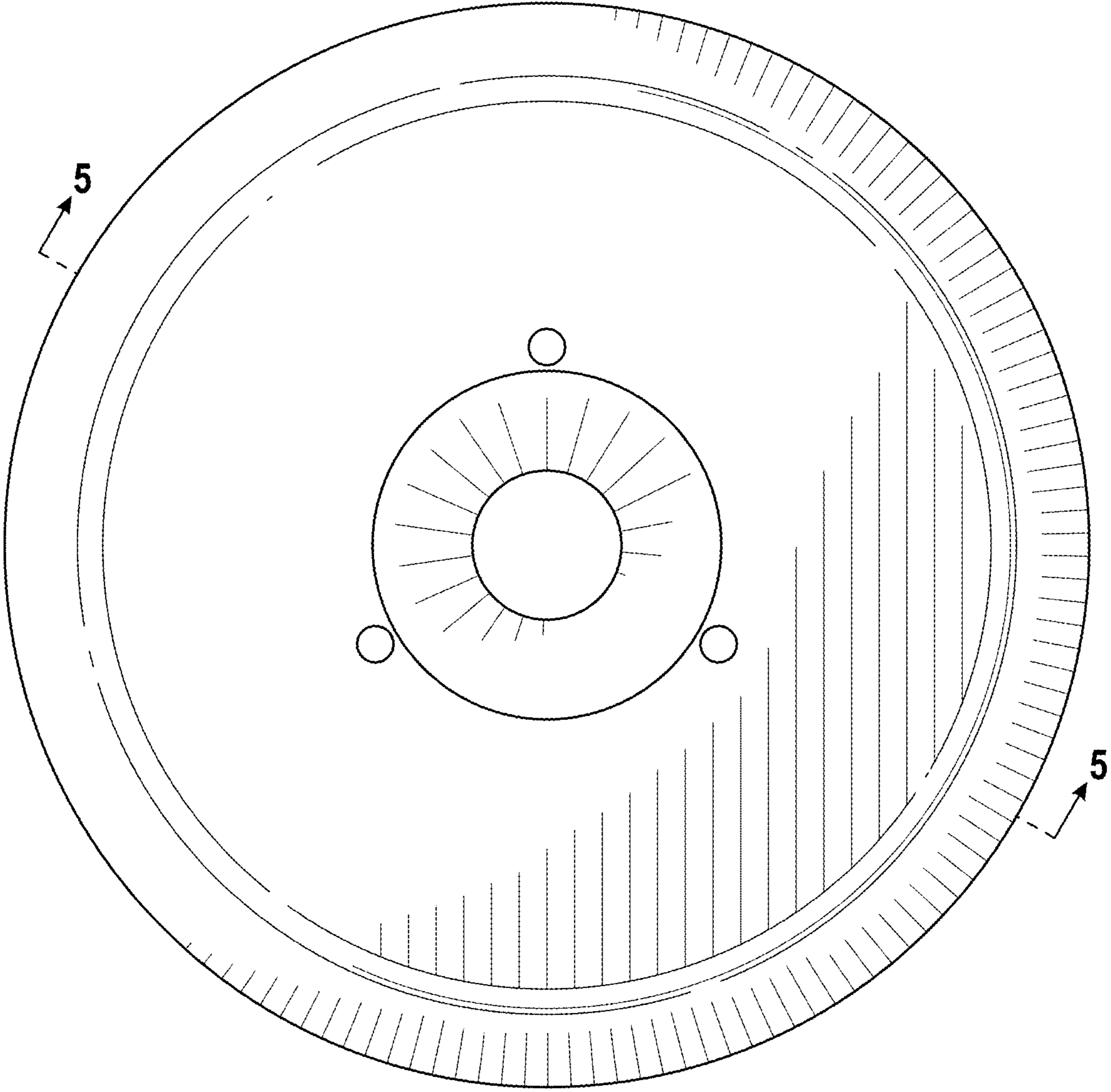


FIG. 2

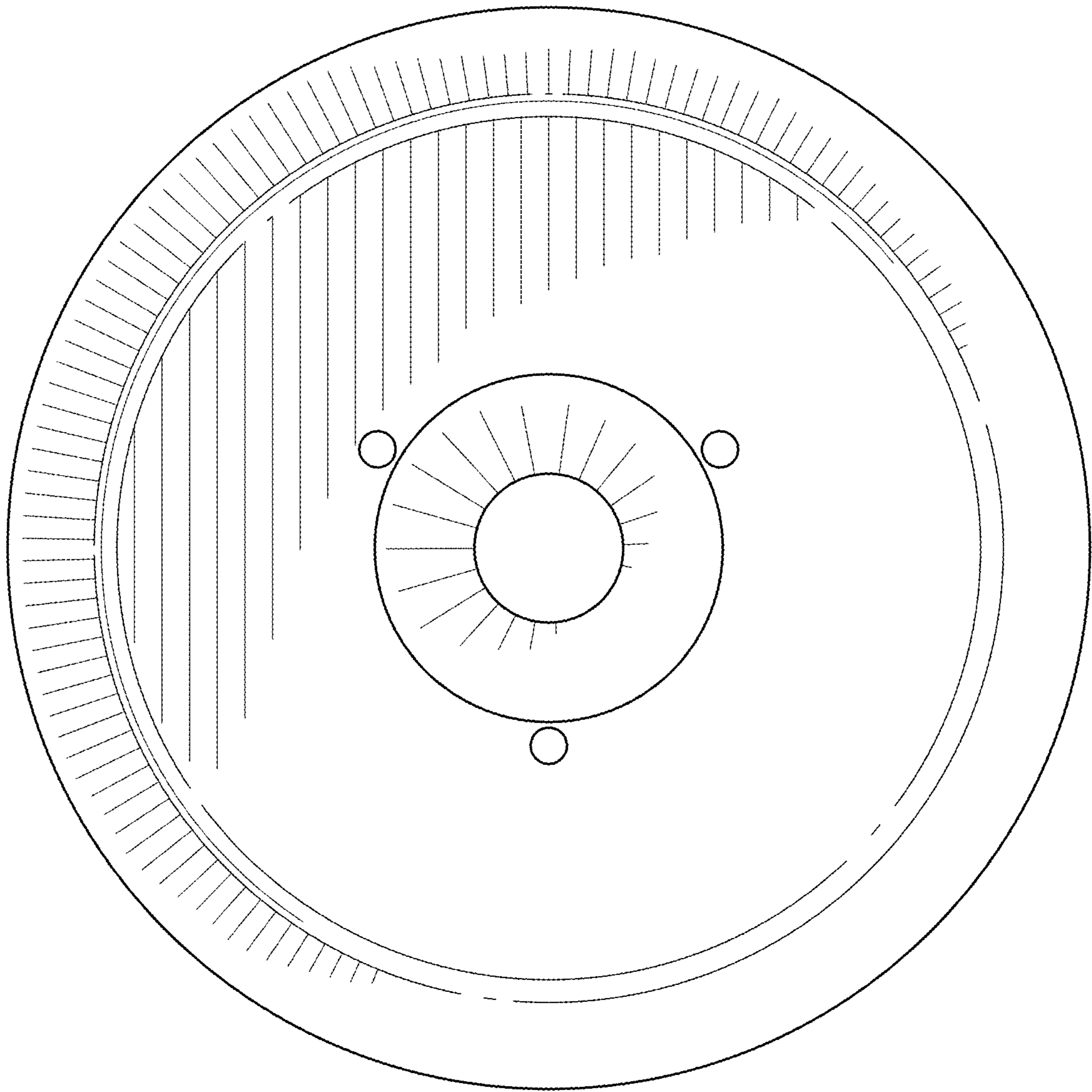


FIG. 3

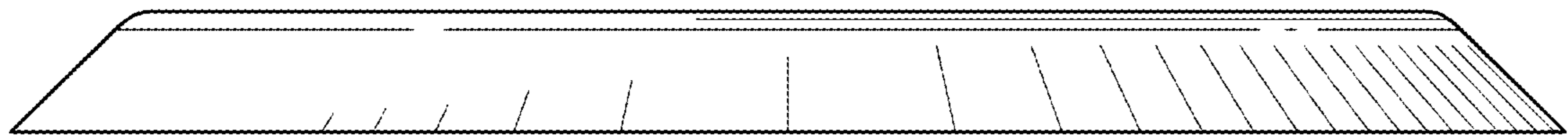


FIG. 4

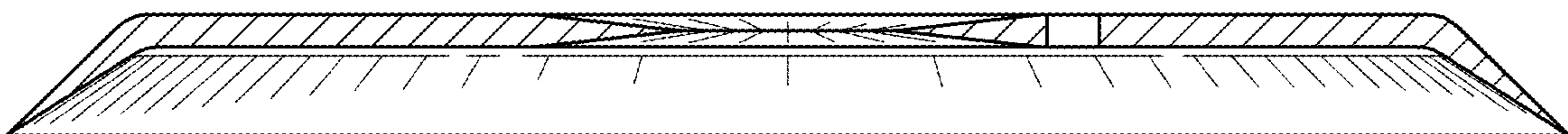


FIG. 5

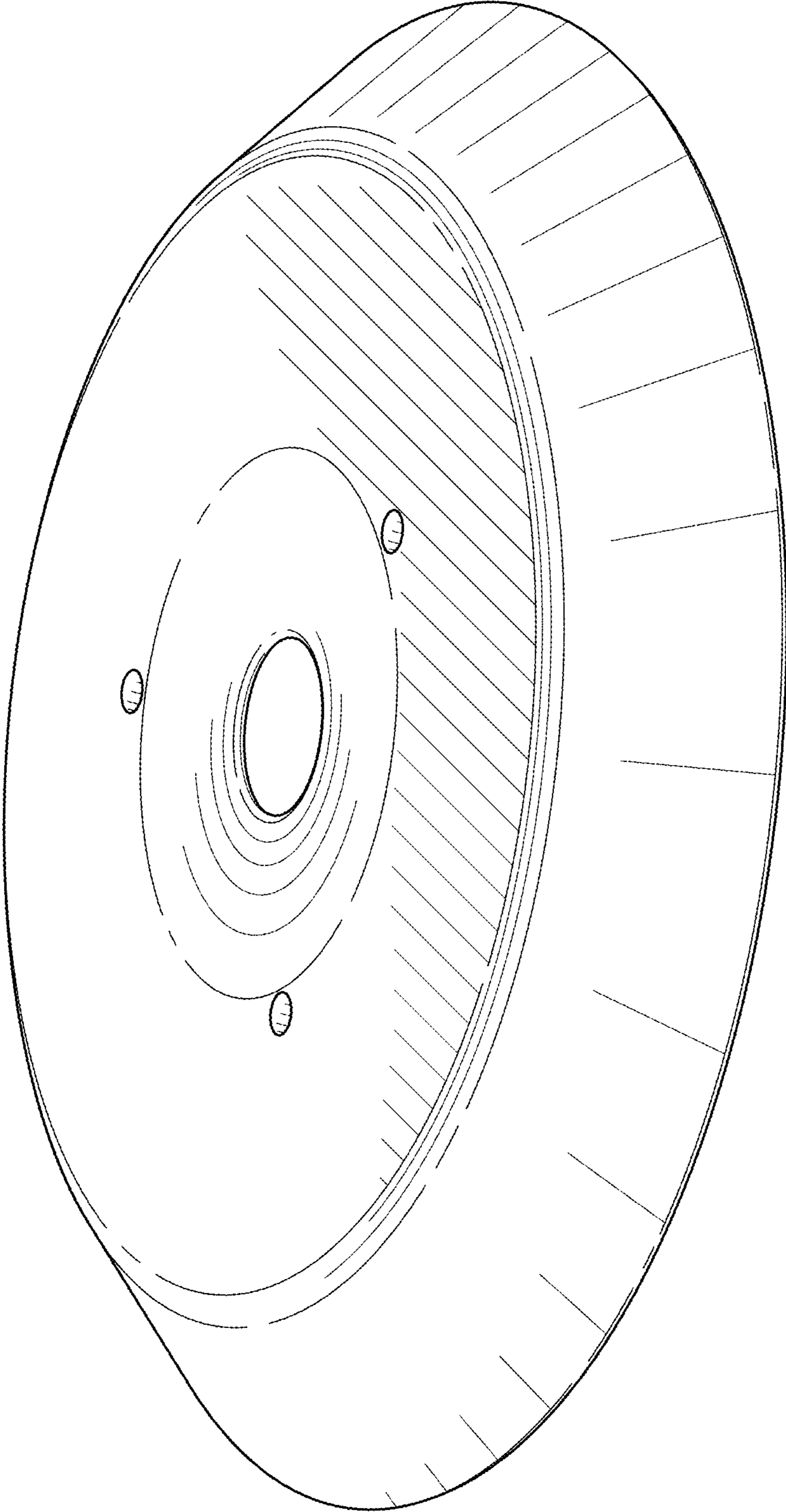


FIG. 6

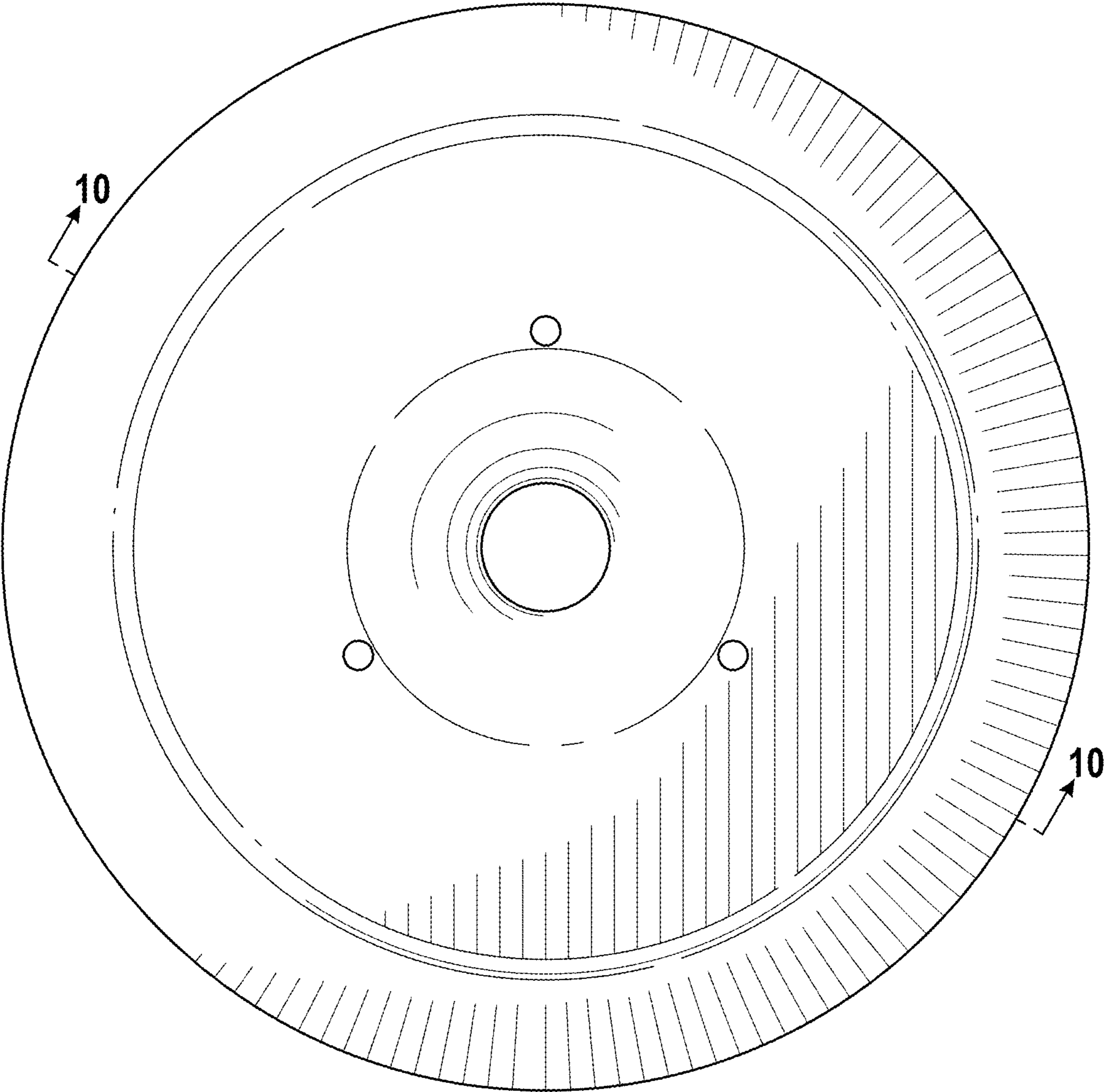


FIG. 7

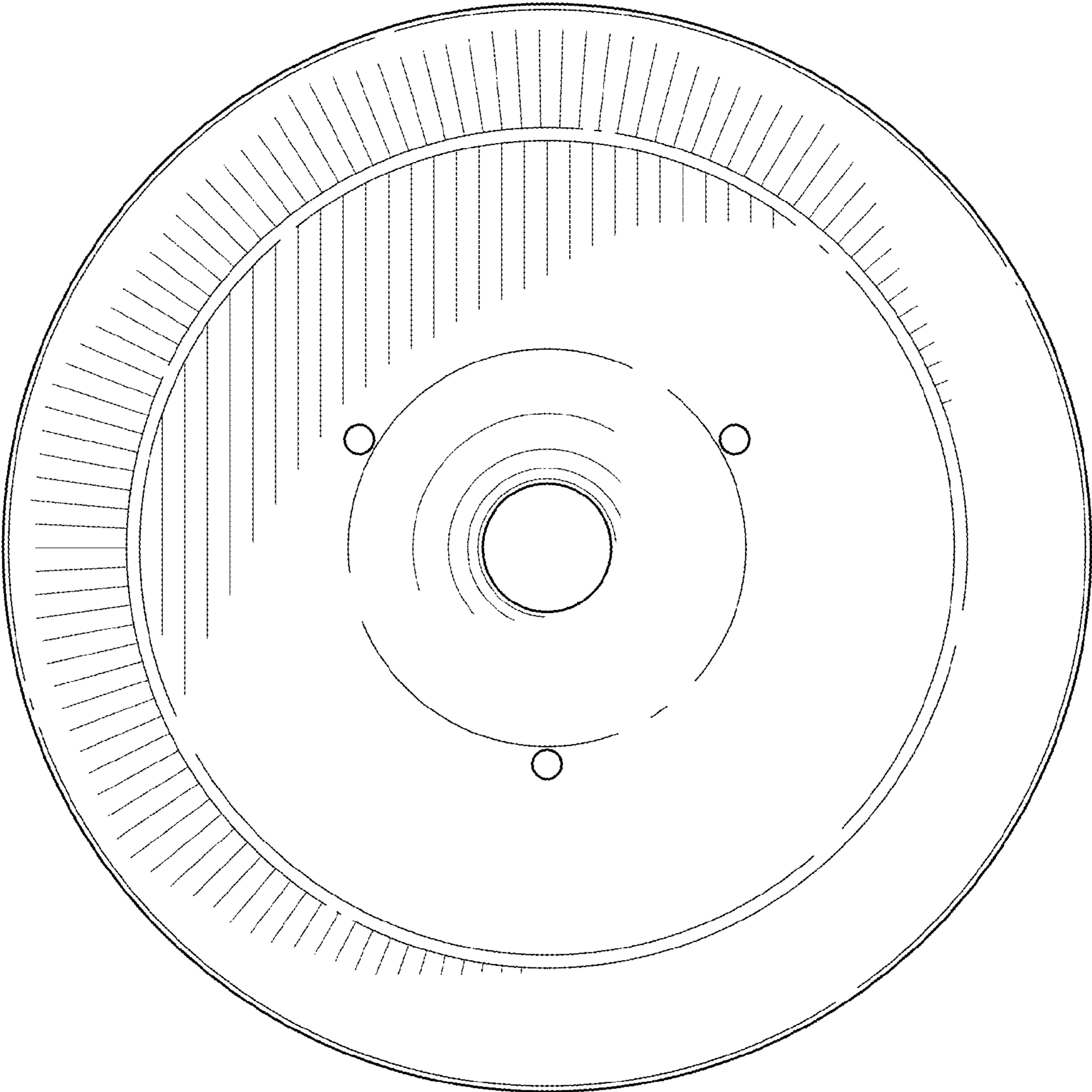


FIG. 8

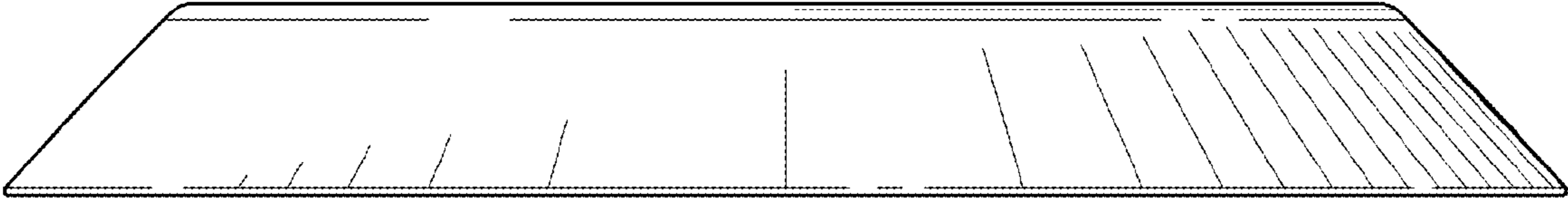


FIG. 9

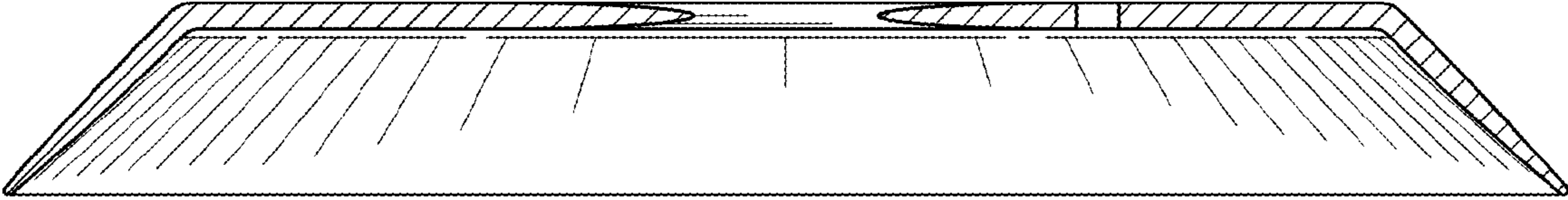


FIG. 10