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(12) **United States Design Patent**
Tomori

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(54) **TEMPORARY PROTECTIVE FILM FOR
MANUFACTURING SEMICONDUCTOR
DEVICES**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/182; D13/199**

(58) **Field of Classification Search**
USPC **D13/182, 180; D19/69, 67; D24/189**
(Continued)

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(57) **CLAIM**

The ornamental design for a temporary protective film for
manufacturing semiconductor devices, as shown and
described.

DESCRIPTION

1. Temporary protective film for manufacturing semicon-
ductor devices

1.1 : Perspective

1.2 : Perspective

1.3 : Front

1.4 : Back

1.5 : Top

1.6 : Bottom

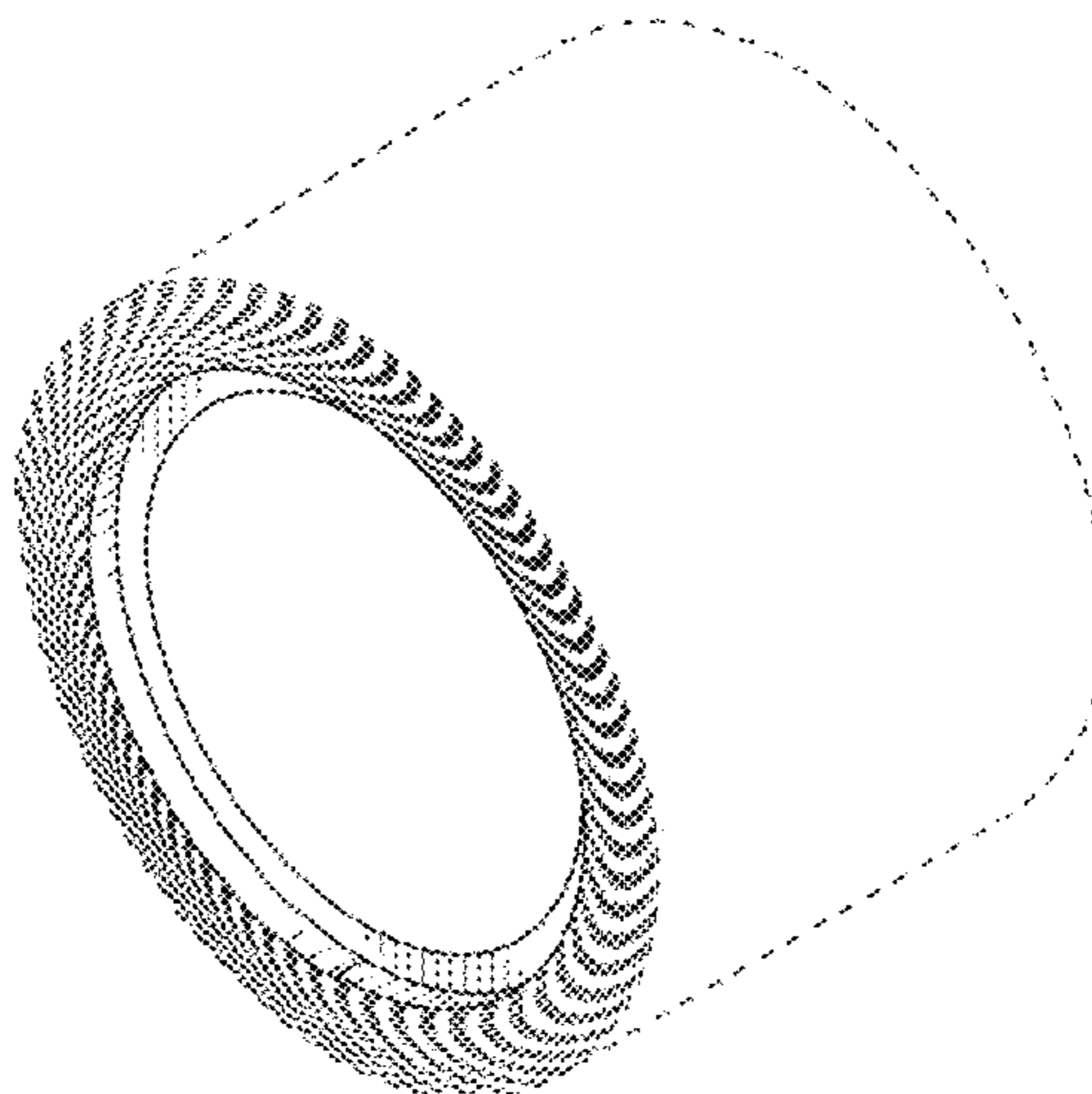
1.7 : Left

1.8 : Right

1.9 : A-A Sectional view

The article includes a core part and a film part, and is shown
with the width of the core part as smaller than the width of
the film part, and the film part is wound while partially
protruding from the core part; this article is temporarily
attached to a back of a lead frame when manufacturing a
semiconductor device with only one side encapsulated and
the lead frame on the back side exposed; the film part of this
article has an adhesive layer on one side; since the core part
does not protrude from the film part, this article can be easily
positioned when set to equipment for manufacturing semi-
conductor devices, and it is possible to prevent this article
from being misaligned when it is temporarily adhered to the
back surface of the lead frame; reproduction **1.9** is a cross-
sectional view taken along the line A-A of reproduction **1.7**;
the parts shown with solid lines in the drawings are parts for

(Continued)



which a partial design registration is sought; the broken lines shown in the drawings are for the purpose of illustrating portions of the article that form no part of the claimed design; the parallel thin lines in the representation represent contours only and do not illustrate an ornamentation or decoration on the surface of the product.

1 Claim, 9 Drawing Sheets

(58) **Field of Classification Search**

CPC B65H 35/0033; B65H 35/0026; B65H 35/008; A61F 15/002; B42F 21/00; B65D 85/672; G11C 11/06; H05K 7/209; C09J 7/385; C09J 133/068

See application file for complete search history.

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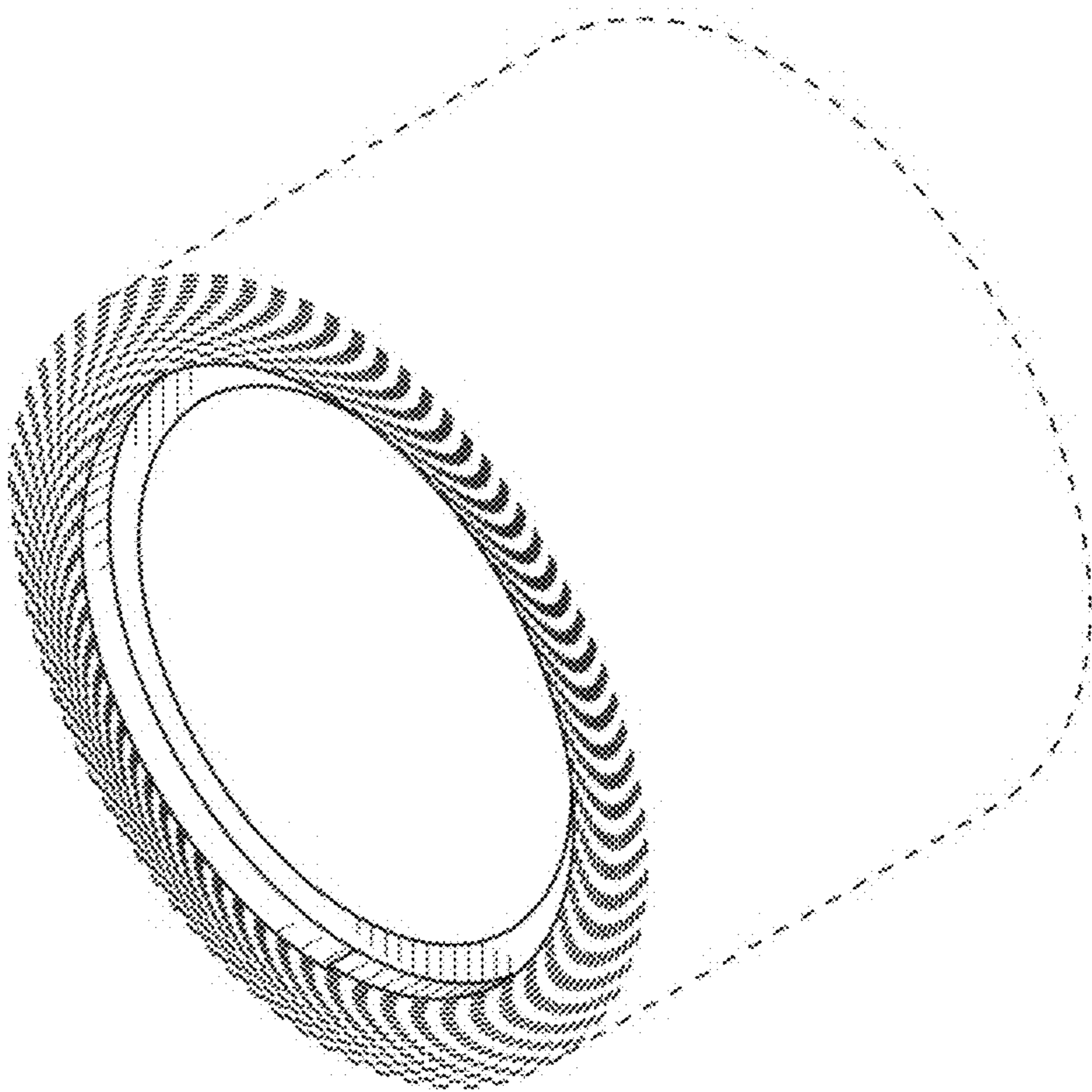
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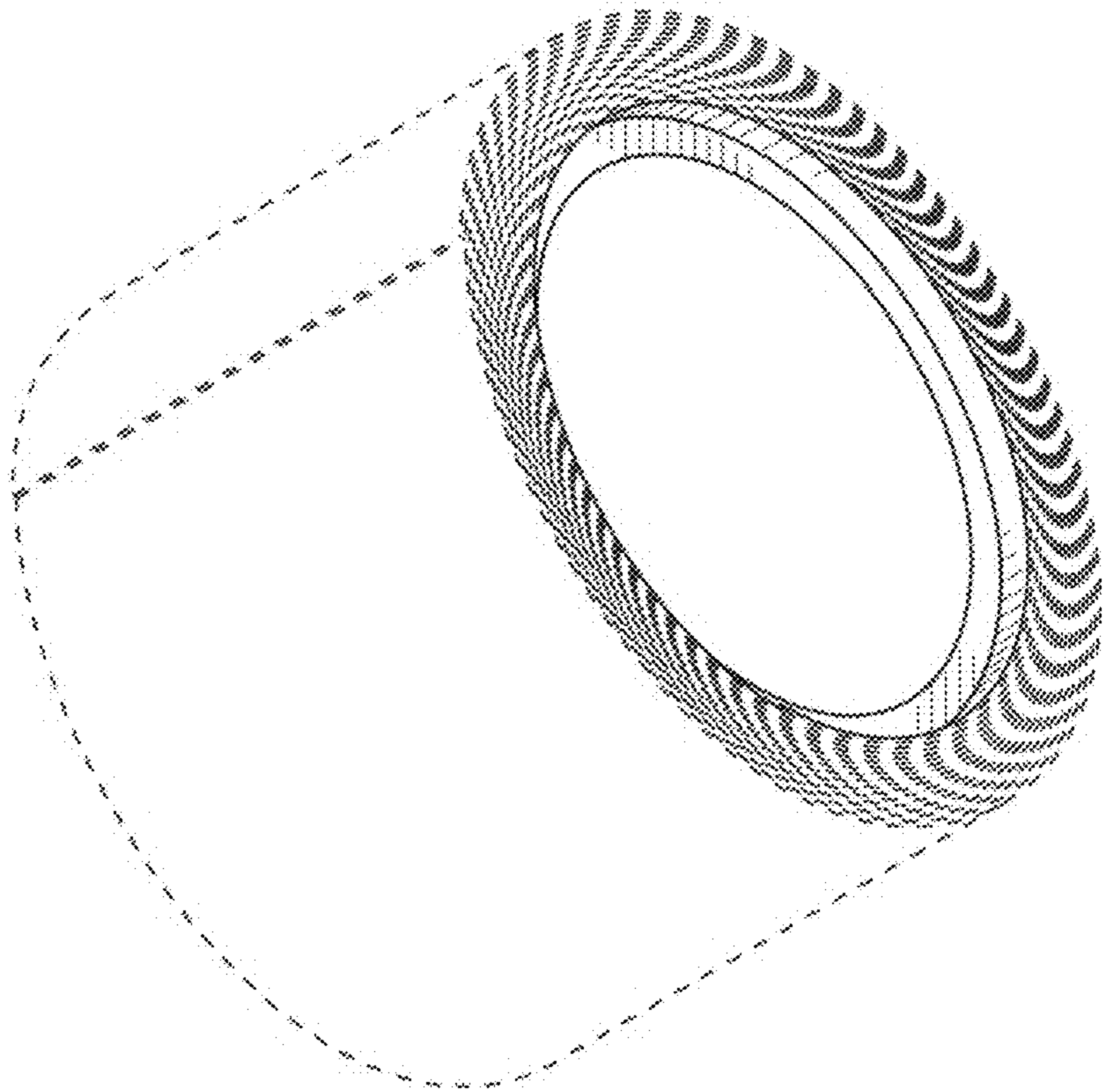
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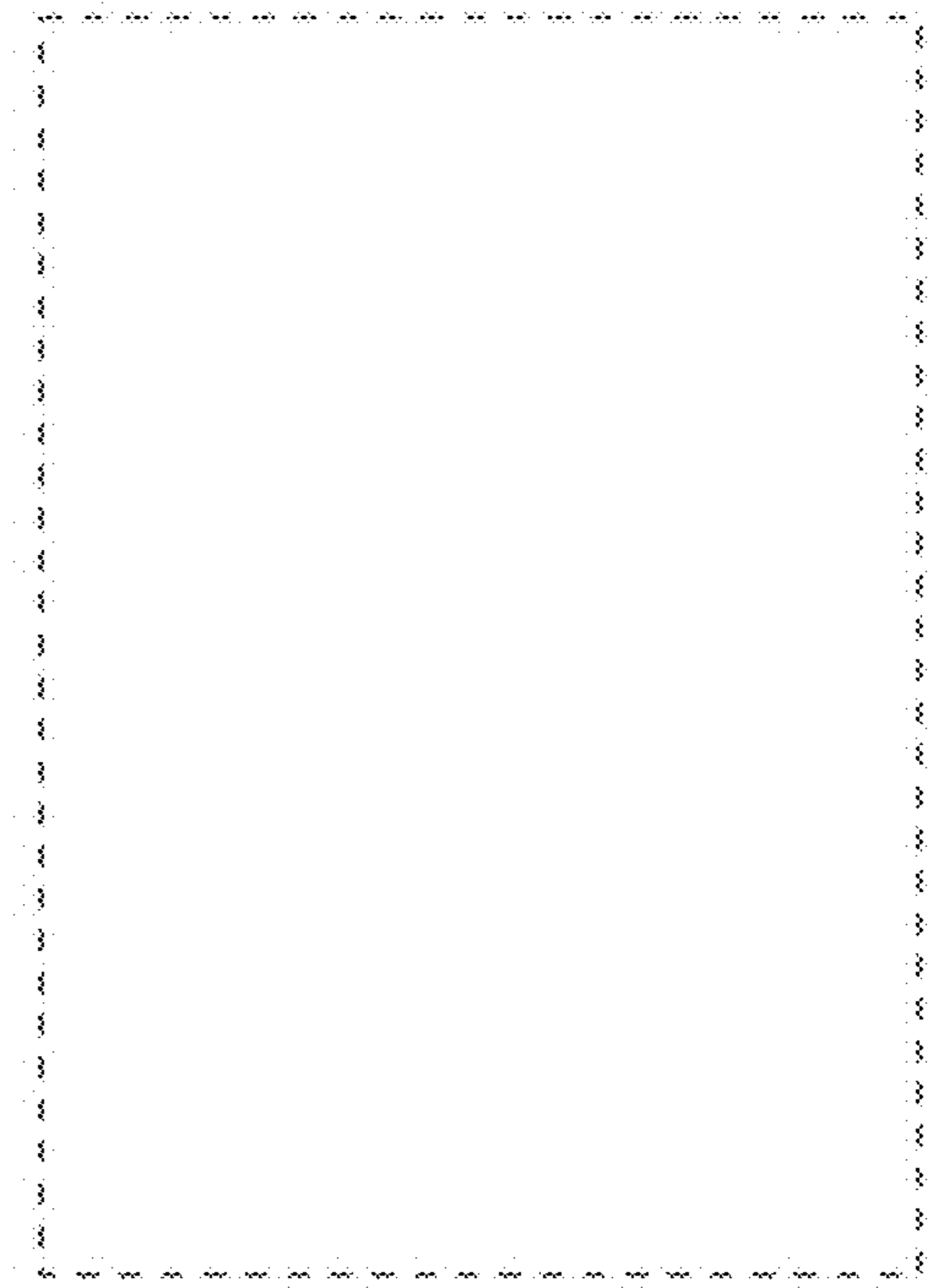
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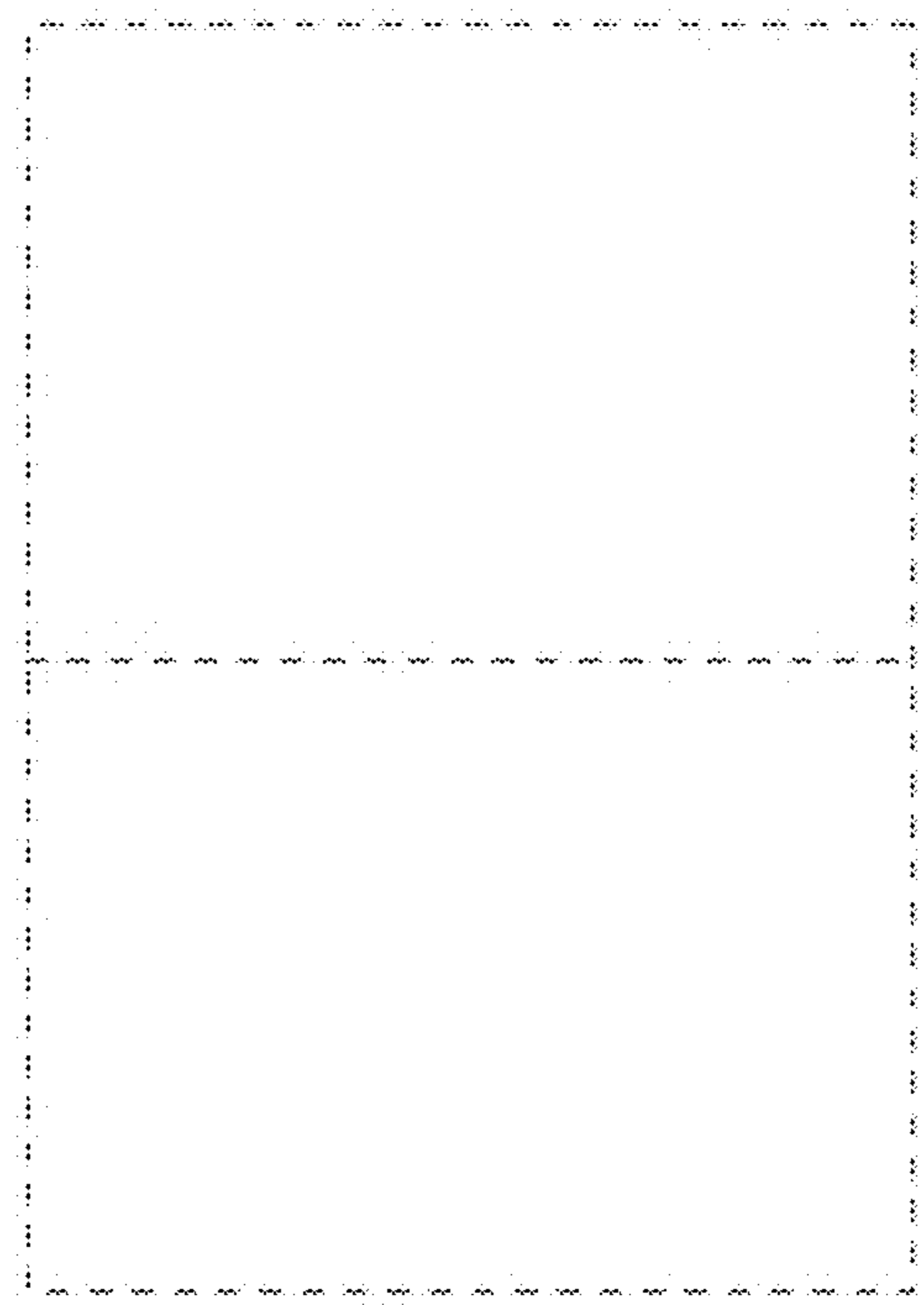
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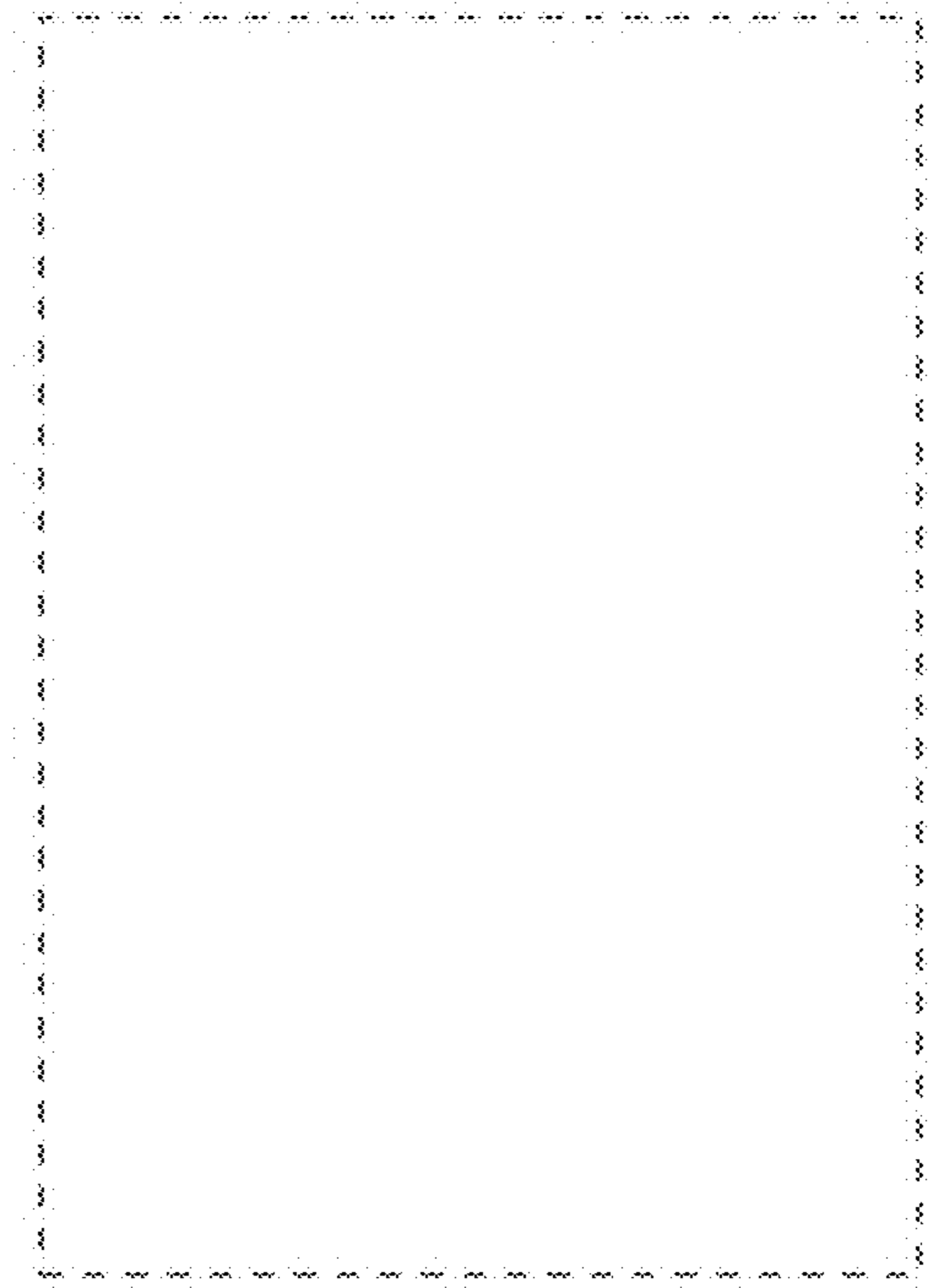
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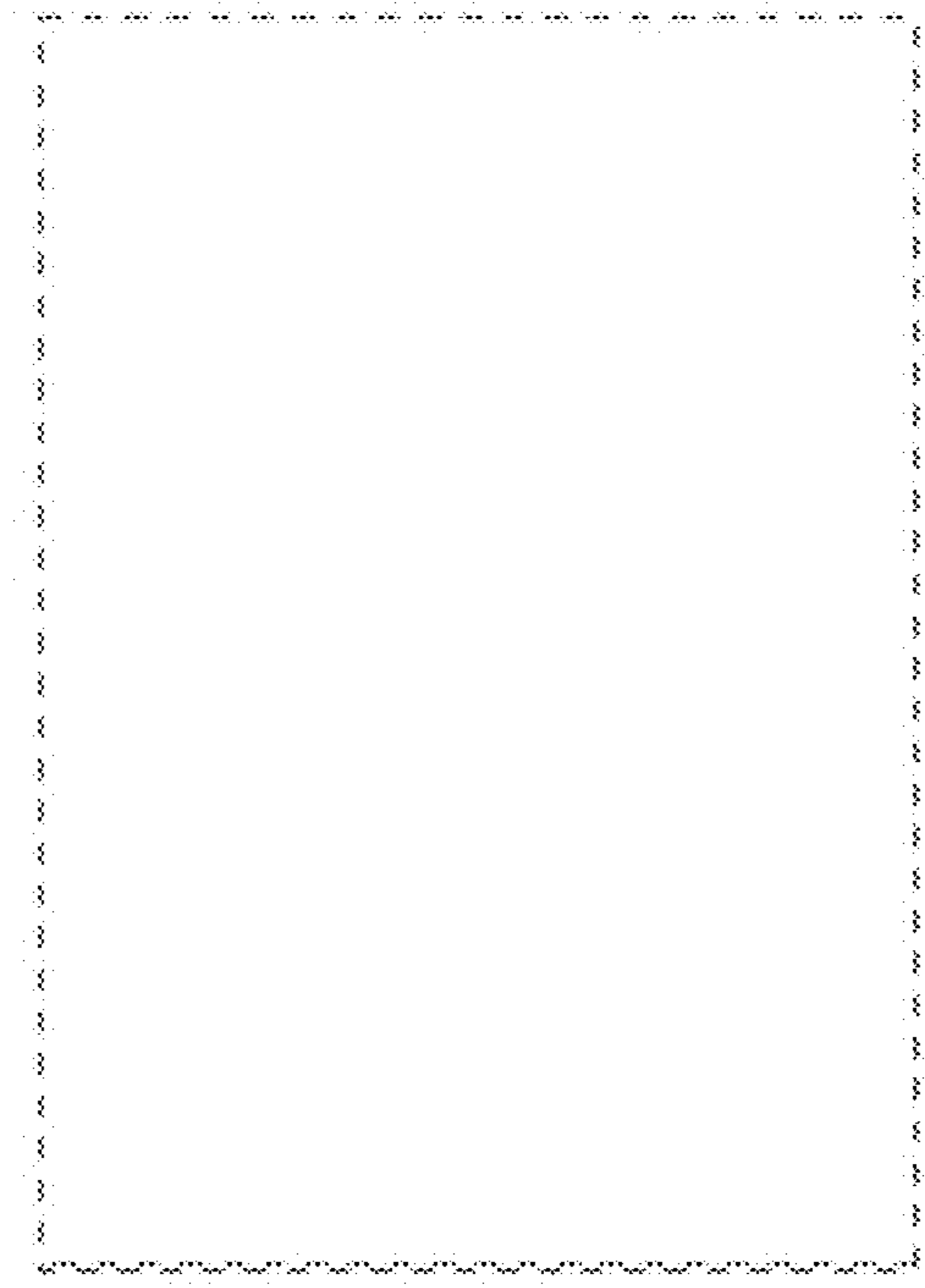
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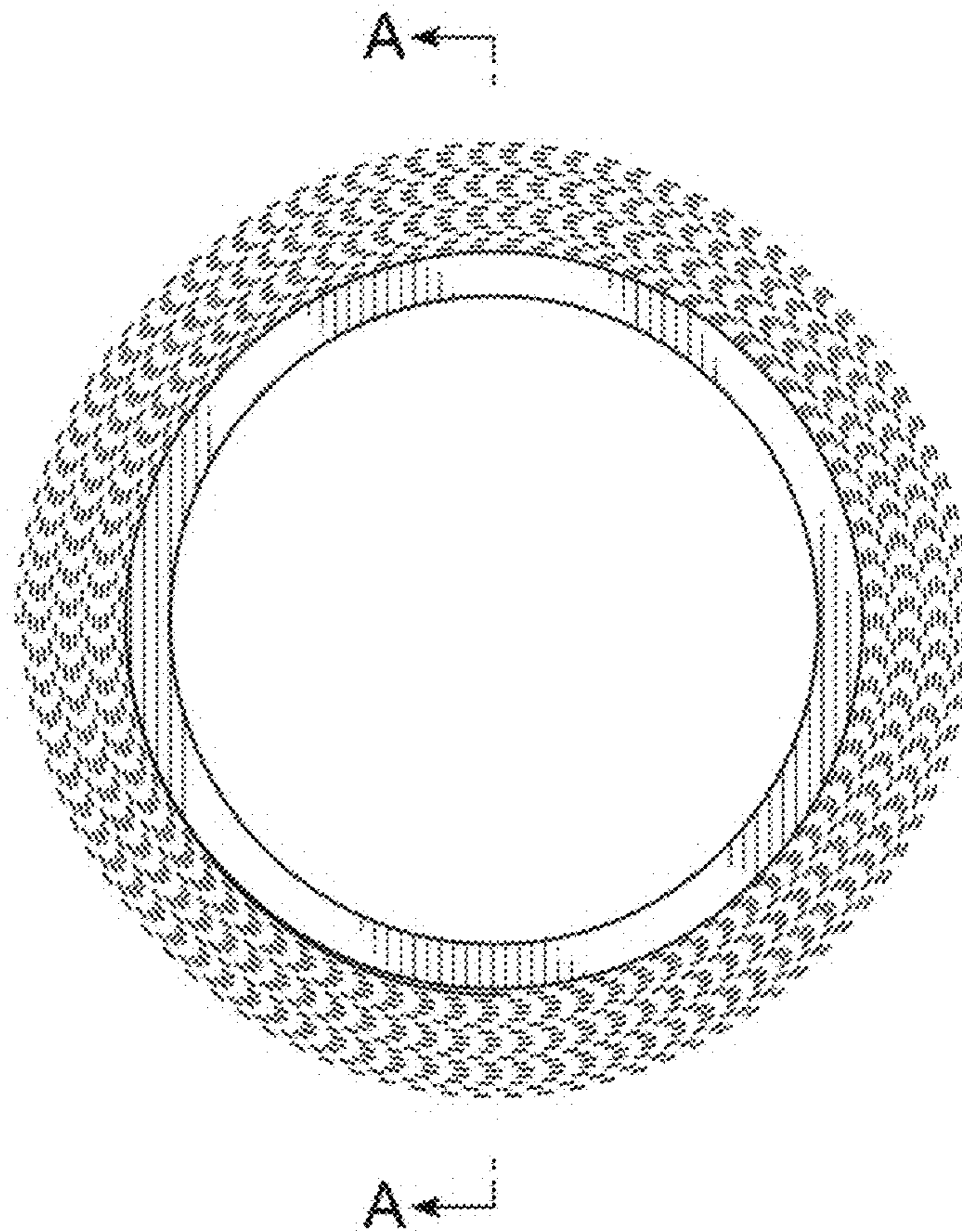
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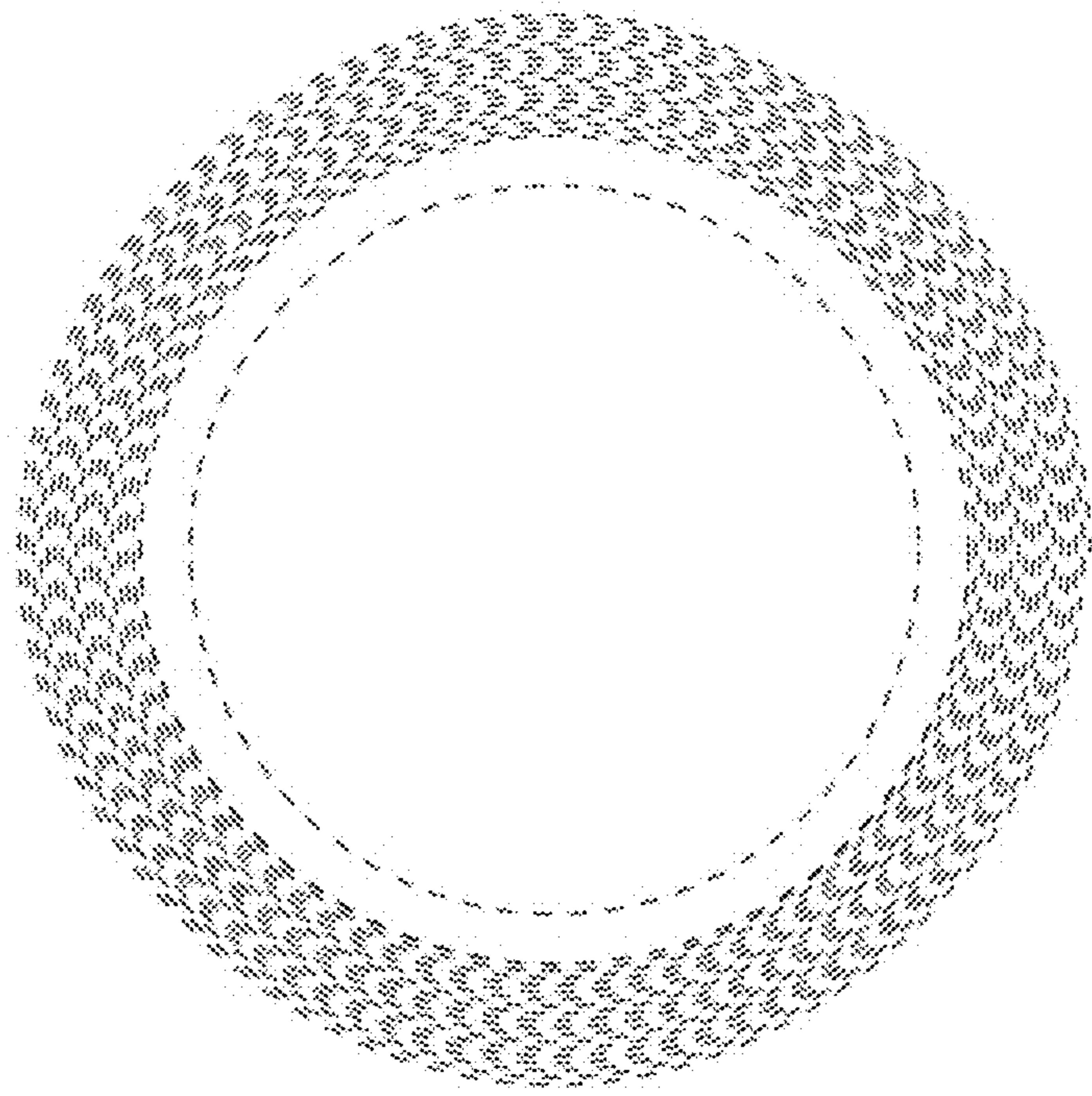
1.6



1.7



1.8



1.9

