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Van Rosmalen

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(54) **PHALAEOPSIS ORCHID PLANT NAMED**
'PHALDANBO'

(50) Latin Name: *Phalaenopsis* spp.
Varietal Denomination: **PHALDANBO**

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patent is extended or adjusted under 35
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USPC **Plt./311**
CPC *A01H 5/00* (2013.01)

(58) **Field of Classification Search**
USPC **Plt./311**
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

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pp. 1-52.*
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(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named
'PHALDANBO', particularly characterized by purple flow-
ers with dark purple lip, 1 to 2 peduncles, a long and sturdy
inflorescence, a narrow oblong leaf shape, and propagated by
tissue culture is disclosed.

3 Drawing Sheets

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Genus and species: *Phalaenopsis* spp.
Variety denomination: 'PHALDANBO'.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct cultivar
of *Phalaenopsis* plant, botanically known as *Phalaenopsis* of
the Orchidaceae family, and hereinafter referred to by the
cultivar name 'PHALDANBO'.

Phalaenopsis comprises a genus of about 60 species of
herbaceous perennials many of which, or the hybrids thereof,
are suitable for cultivar in the home or greenhouse.
Phalaenopsis is predominantly epiphytic or rock dwelling,
and is native to tropical Asia, the Malay Archipelago, and
Oceania. The species typically has 2-ranked, fleshy, oblong or
elliptic leaves affixed to a short central stem (monopodial
growth), which vary in size from 12 to 20 cm to over 60 cm.
The leaves may be entirely green or mottled with silver grey.

Phalaenopsis orchids, often referred to as 'Moth Orchids'
in the horticultural trade, are frequently used to furnish cut
flowers for the florist trade or sold as flowering potted-plants
for home or interiorscape.

Phalaenopsis produces upright or pendent lateral racemes,
often with many showy flowers which open in succession
beginning with the lowermost. The flowers possess three
sepals and three petals; the lateral ones being alike. The
lowermost petals, called the labellum, is three-lobed and is
often more brightly-colored than the other flower segments.
Flower colors include various shades of pink, white, yellow,
and red-brown.

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Phalaenopsis orchids are typically propagated from seeds.
Asexual propagation of *Phalaenopsis* is often done from
off-shoots which arise from the lower bracts of the inflores-
cence. The resulting plants are detached from the mother
plants and may be planted in a suitable substrate.

The new *Phalaenopsis* 'PHALDANBO' is particularly
characterized by its attractive and unique purple flowers, eco-
nomical propagation by tissue culture, rapid growth, and a
plant dimension suitable for packaging and shipping to the
market.

'PHALDANBO' is a product of a planned breeding pro-
gram conducted in Bleiswijk, The Netherlands.

The new *Phalaenopsis* 'PHALDANBO' originated from a
cross made in October 2003 in Bleiswijk, The Netherlands.
The female parent is a purple *Phalaenopsis* pot plant name
'21440-02' (unpatented), while the male parent is a purple
Phalaenopsis pot plant named '01-1434' (unpatented). A
single plant was selected in March 2007 and has been asexu-
ally reproduced repeatedly by meristem tissue culture in
Bleiswijk, The Netherlands over a 5-year period. The new
variety has been found to retain its distinctive characteristics
through successive asexual propagations.

Asexual reproduction of 'PHALDANBO' by meristem tis-
sue culture was first performed in September 2010 in
Bleiswijk, The Netherlands and has demonstrated that the
new cultivar is firmly fixed and retained through successive
generations of asexual reproduction.

Plant Breeder's Rights for this variety have been applied
for in Europe on Jan. 15, 2013. 'PHALDANBO' has not been

made publicly available or sold anywhere in the world more than one year prior to the filing date of this application.

SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Bleiswijk, The Netherlands.

- 1) Purple flower with dark purple lip;
- 2) 1 to 2 peduncles;
- 3) Inflorescence is long and sturdy;
- 4) The shape of the leaf is narrow oblong; and
- 5) Plants are propagated by tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

This new *Phalaenopsis* plant is illustrated by the accompanying photographs which show the overall plant habit including blooms, buds and foliage of the plant; the colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of a 50-week old plant grown in a greenhouse in Bleiswijk, The Netherlands in May 2013.

FIG. 1 shows the overall plant habit, including blooms, buds and foliage of 'PHALDANBO'.

FIG. 2 shows a close-up of the flower of 'PHALDANBO'.

FIG. 3 shows a close-up of the leaves of 'PHALDANBO'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALDANBO'. The data which define these characteristics were collected from asexual reproductions carried out in Bleiswijk, The Netherlands. The plant history was taken on 50-week old plants which were planted from tissue culture in 12 centimeter pots and grown in a greenhouse between 27° C. to 29° C. for 30 weeks, continued by a cooling period of 8 weeks between 18° C. to 20° C. and 12 weeks in a greenhouse of 21° C. Observations were made in May 2013. Color readings were taken under 4000 till 6000 lux natural light in the greenhouse. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (1995).

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* spp.

Common name.—*Phalaenopsis*.

Variety name.—'PHALDANBO'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '21440-02' (unpatented).

Male parent.—*Phalaenopsis* cultivar '01-1434' (unpatented).

Propagation:

Type.—Meristem tissue culture.

Plant:

Crop time (time to produce a finished flowering plant).—48 to 50 weeks for a 12 cm pot.

Growth habit of inflorescence.—Standard type, green leaves and raceme.

Height (including pot, including inflorescence).—60.0 cm to 65.0 cm.

Width (measured from leaf tips).—44.0 cm to 48.0 cm.

Vigor.—Moderate to strong.

Roots:

Root description.—Grey-green-colored roots with light branching lateral roots having grey-green-colored root tips.

Leaves:

Mature leaves.—Quantity per plant: 6 to 7 leaves are produced before flowering. Length (fully expanded): 22.0 cm to 26.0 cm. Width: 6.0 cm to 8.0 cm. Shape: Narrow oblong. Apex: Obtuse. Leaf blade angle with the petiole: Between 25 degrees and 45 degrees. Leaf margin: Entire. Color: Upper surface: RHS 147A. Lower surface: RHS 146B. Texture: Smooth. Thickness: 2.2 mm. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 139A. Lower surface: RHS 146A.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—9 to 14.

Length.—40.0 cm to 50.0 cm.

Diameter.—About 0.6 cm.

Strength.—Strong.

Aspect.—Upright.

Texture.—Smooth.

Color.—Brown (RHS 200 A).

Internode length.—80.0 mm to 110.0 mm.

Inflorescence description:

Appearance.—Upright to slightly pendant, raceme inflorescence with bilaterally symmetrical flowers that open in succession beginning with the lowermost flower.

Inflorescence size.—Height (from base to tip): 90.0 mm to 170.0 mm. Diameter: 150.0 mm to 200.0 mm

Flowering time.—First flowers can be expected 10 to 11 months after planting in a 12 cm pot, as mentioned in the botanical description.

Flower.—Height: 68.0 mm to 70.0 mm. Diameter: 84.0 mm to 86.0 mm. Depth of lip: 18.0 mm to 20.0 mm.

Flower longevity.—On the plant: 12 to 14 weeks.

Fragrance.—Absent.

Petals.—Arrangement: Open. Shape: Semi-circular.

Apex: Mucronate and symmetric. Margin: Slightly undulate. Length: 50.0 mm to 52.0 mm. Width: 36.0 mm to 38.0 mm. Color (when fully opened): Main color: Purple (RHS 78A). At the base: Purple (RHS 78A).

Dorsal sepal.—Shape: Elliptic. Length: 38.0 mm to 40.0 mm. Width: 32.0 mm to 34.0 mm. Color (when fully opened): Main color: Purple (RHS 78A). At the base: Purple (RHS 78A).

Lateral sepals.—Shape: Ovate. Length: 28.0 mm to 30.0 mm. Width: 38.0 mm to 40.0 mm. Color (when fully opened): Main color: Purple (RHS 78A). At the base: Purple with a touch of yellow and red spots (RHS 78A, 2D, 59B).

Labellum (lip).—Margin: Slightly undulate. Length: 20.0 mm to 22.0 mm. Width: 21.0 mm to 23.0 mm. Pubescence: Absent. Whiskers: Length: 11.0 mm to 12.0 mm. Color: Dark red-purple (RHS 187A and 59A).

Lateral lobe.—Shape: type V (as described in the International Union for the Protection of New Varieties of Plants (UPOV) Test Guidelines for *Phalaenopsis*); spatulate. Color: Purple with red shade and a touch of

yellow with red stripes (RHS 78A, 59A, 6D). Length: 20.0 mm to 22.0 mm. Width: 19.0 mm to 21.0 mm.

Apical lobe.—Shape: Obdeltoid. Color: Dark purple (RHS 59A). Length: 16.0 mm to 18.0 mm. Width: 12.0 mm to 14.0 mm.

Callus.—Color: Yellow with dark purple spots (RHS 15A, 59A).

Reproductive organs:

Arrangement.—The stamens, style and stigmas are fused into a single, short structure called the column, possessing one terminal anther with pollen grains united into pollinia, which are covered by an anther cap. The stigma is located under the column behind the pollinia. The ovary is inferior with three carpels present.

Column.—Length: 8.5 mm to 9.5 mm. Diameter: 6.0 mm to 7.0 mm. Color: Purple (RHS 78A).

Pollinia.—Quantity: 2. Size: 0.9 mm to 1.0 mm. Color: Orange (RHS 17A).

Ovary.—Length: 9.0 mm to 10.0 mm. Diameter: 4.0 mm to 5.0 mm.

Pedicel.—Length: 26.0 mm to 32.0 mm. Diameter: 2.0 mm to 3.0 mm.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed.

Temperature tolerance: Tolerant to a low temperature of 15° C. and a high temperature about 30° C.

COMPARISON WITH PARENTAL AND
COMMERCIAL VARIETIES

‘PHALDANBO’ differs from female parent ‘21440-02’ (unpatented) in that ‘PHALDANBO’ has a spotted callus, whereas ‘21440-02’ has a striped callus. Additionally, ‘PHALDANBO’ has longer whiskers than ‘21440-02’.

‘PHALDANBO’ differs from male parent ‘01-1434’ (unpatented) in that ‘PHALDANBO’ has a mucronate and symmetric petal apex, whereas ‘01-1434’ has an emarginated and asymmetric petal apex. Additionally, ‘PHALDANBO’ has wider petals than ‘01-1434’.

‘PHALDANBO’ differs from commercial variety ‘PHALBATZOM’ (unpatented) in that ‘PHALDANBO’ has petals that are free, whereas ‘PHALBATZOM’ has petals that are touching. Additionally, ‘PHALDANBO’ has longer whiskers and a darker lateral lobe than ‘PHALBATZOM’.

I claim:

1. A new and distinct variety of *Phalaenopsis* plant named ‘PHALDANBO’ as shown and described herein.

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FIG. 1

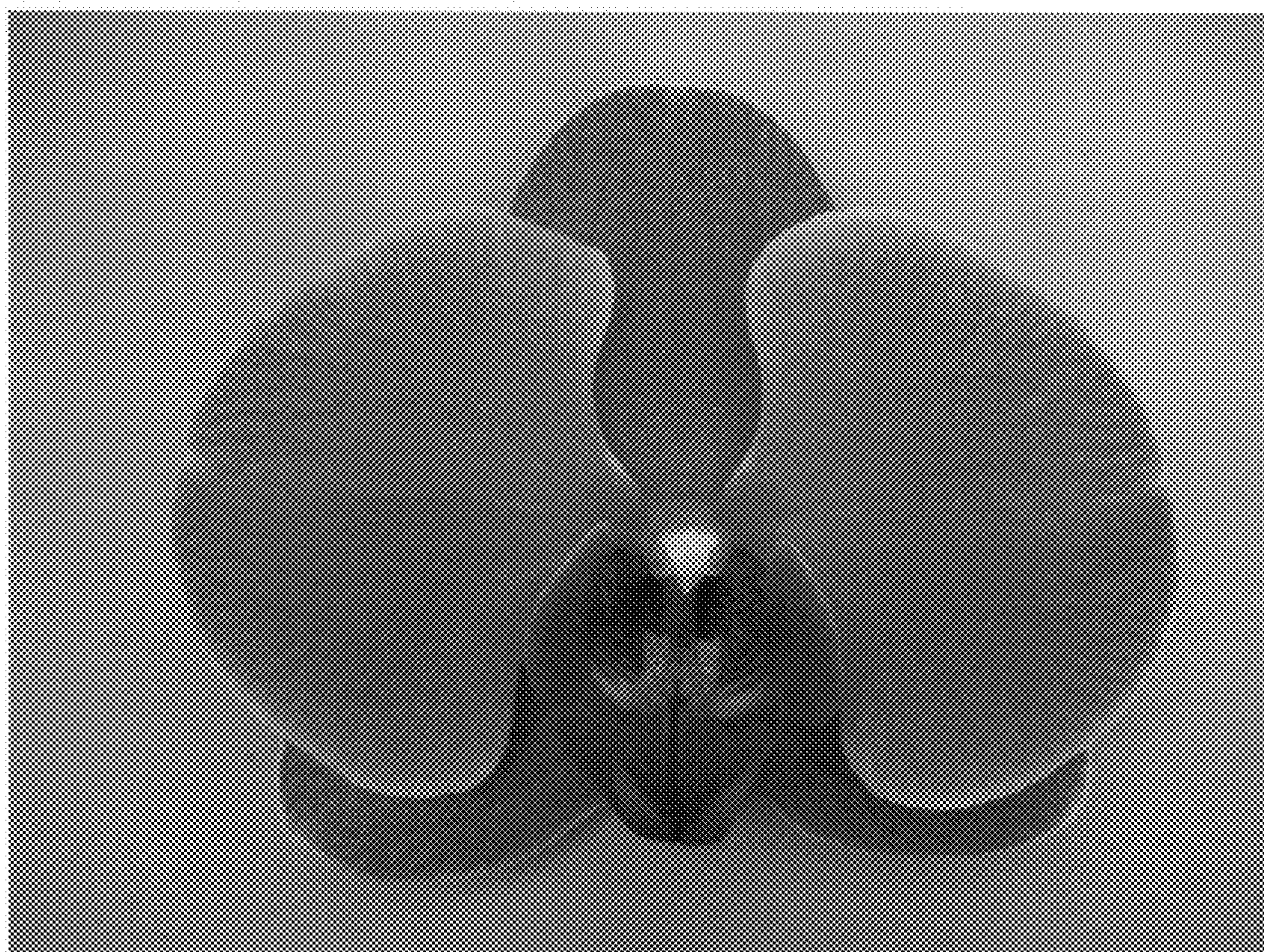


FIG. 2

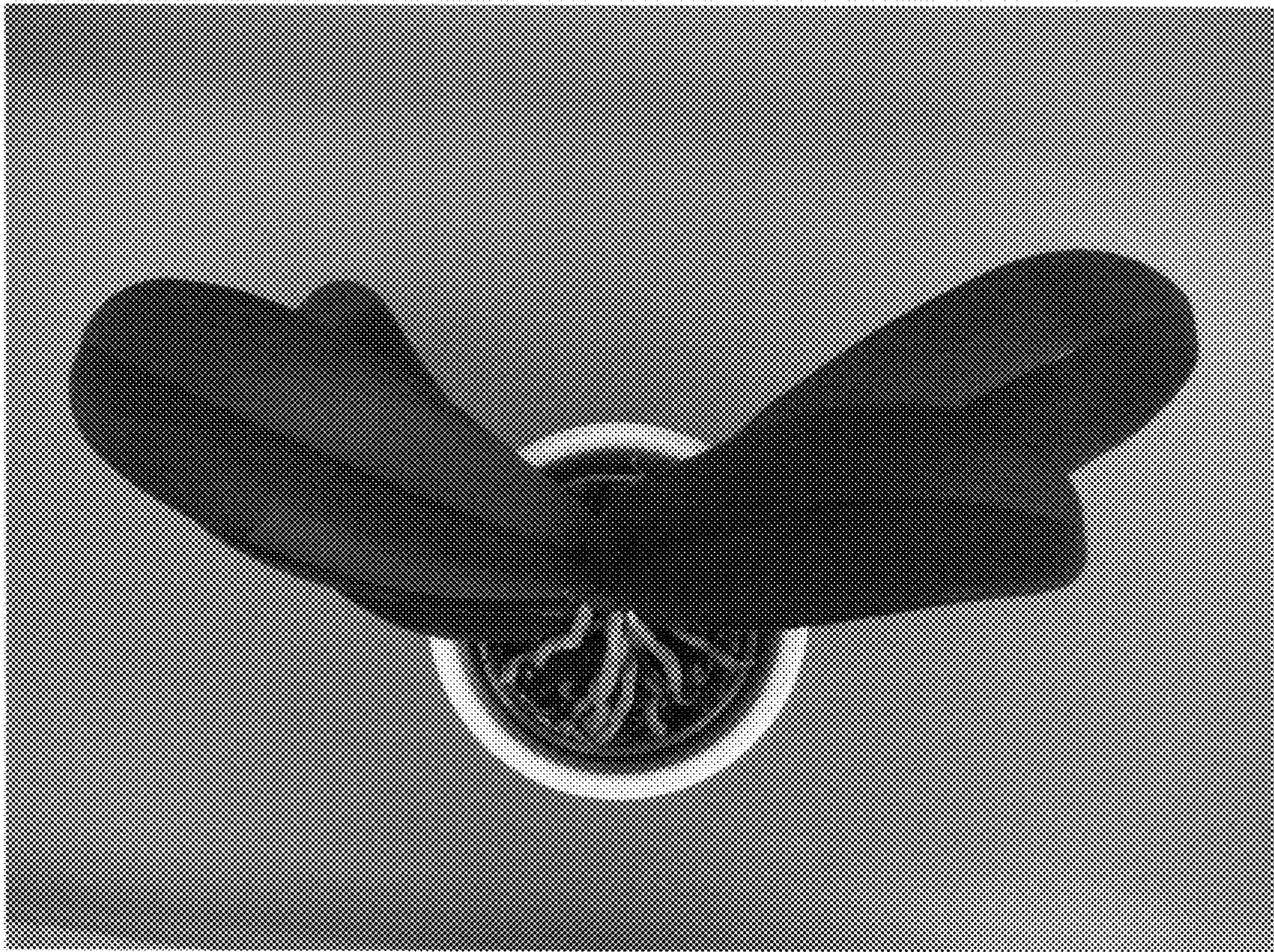


FIG. 3