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Van Swieten

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(54) **PHALAENOPSIS ORCHID PLANT NAMED**
‘PHALDESBIM’

(50) Latin Name: *Phalaenopsis* hybrid
Varietal Denomination: **PHALDESBIM**

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A01H 5/02 (2006.01)

(52) **U.S. Cl.**
USPC **Plt./311**

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

(56) **References Cited**

PUBLICATIONS

Enclosure for the Plant Patent application of Anthura BV, 13 pages,
2015.

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(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named
‘PHALDESBIM’, particularly characterized by having
bright purple flowers with small light centers, 1 to 2
peduncles, an inflorescence that is long and moderate, leaves
that are oblong, and is propagated by meristem tissue
culture, is disclosed.

3 Drawing Sheets

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Genus and species: *Phalaenopsis* hybrid.
Variety denomination: ‘PHALDESBIM’.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct cul-
tivar of *Phalaenopsis* plant, botanically known as *Phalae-*
nopsis of the Orchidaceae family, and hereinafter referred to
by the cultivar name ‘PHALDESBIM’.

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 pos-
sess three sepals and three petals; the lateral ones being
alike. The lowermost petals, called the labellum, are three-
lobed and are often more brightly-colored than the other
flower segments. Flower colors include various shades of
pink, white, yellow, and red-brown.

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
inflorescence. The resulting plants are detached from the
mother plants and may be planted in a suitable substrate.

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The new *Phalaenopsis* ‘PHALDESBIM’ is particularly
characterized by its attractive and unique bright purple
flowers with small light centers, economical propagation by
tissue culture, rapid growth, and a plant dimension suitable
for packaging and shipping to the market.

‘PHALDESBIM’ is a product of a planned breeding
program conducted by the inventor in Bleiswijk, The Neth-
erlands.

The new *Phalaenopsis* ‘PHALDESBIM’ originated from
a cross made in February 2005 in Bleiswijk, The Nether-
lands. The female parent is a purple *Phalaenopsis* pot plant
named ‘10007-0001’ (unpatented), while the male parent is
a light purple with center *Phalaenopsis* pot plant named
‘22790-0002’ (unpatented). A single plant was selected in
August 2008 and has been asexually reproduced repeatedly
by meristem tissue culture in Bleiswijk, The Netherlands
over a 4.5-year period. The new variety has been found to
retain its distinctive characteristics through successive
asexual propagations.

Asexual reproduction of ‘PHALDESBIM’ by tissue cul-
ture was first performed in June 2011 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 Sep. 29, 2014. ‘PHALDESBIM’ 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 distinguish-
ing characteristics of this new cultivar when grown under
normal horticultural practices in Bleiswijk, The Nether-
lands.

- 1) Bright purple flowers with a small light center;
- 2) 1 to 2 peduncles;
- 3) Inflorescence is long and moderate;
- 4) Shape of the leaf is oblong; and
- 5) Plants are propagated by meristem tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

This new *Phalaenopsis* plant is illustrated by the accompanying photographs which show the overall plant habit including blooms 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 August 2015.

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

FIG. 2 shows a close-up of a flower of 'PHALDESBIM'.

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

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALDESBIM'. 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 a nursery tray 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 August 2015. Color readings were taken under 4-6000 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* hybrid.

Common name.—*Phalaenopsis*.

Variety name.—'PHALDESBIM'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '10007-0001' (unpatented).

Male parent.—*Phalaenopsis* cultivar '22790-0002' (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, green leaves, raceme to panicle.

Height (including pot, including inflorescence).—58.0 cm to 68.0 cm.

Width (measured from leaf tips).—33.0 cm to 37.0 cm.

Vigor.—Moderate.

Roots:

Root description.—Greyed-green colored roots with lightly branching lateral roots having light green colored root tips.

Leaves:

Mature leaves.—Quantity per plant: 5 to 8 leaves are produced before flowering. Length (fully expanded): 16.0 cm to 18.0 cm. Width: 7.0 cm to 9.0 cm. Shape: Obovate. Base shape: Moderately elongated. Apex: Unequal obtuse. Leaf blade angle with the petiole (measured from the horizontal position): Between 15 degrees and 45 degrees. Leaf margin: Entire. Color: Upper surface: RHS 147A with small edge (diluted RHS 183C). Lower surface: Mix of RHS 146B and 187A. Texture: Slightly rough. Thickness: 2.1 mm to 2.4 mm. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 147A. Lower surface: RHS 187A.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—10 to 15.

Length.—50.0 cm to 55.0 cm.

Diameter.—4.8 mm to 5.3 mm.

Strength.—Strong.

Aspect.—Upright to slightly pendent.

Texture.—Slightly rough.

Color.—Brown (RHS 200A) with small greyed-green spots (RHS 191B).

Internode length.—30.0 mm to 40.0 mm.

Callosities.—None.

Inflorescence description:

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

Inflorescence size.—Height (from base to tip): 265.0 mm to 295.0 mm. Diameter: 4.1 mm to 4.4 mm.

Flowering time.—First flowers can be expected 10 to 11 months after planting in a 12 cm pot.

Flower.—Height: 70.0 mm to 75.0 mm. Diameter: 85.0 mm to 90.0 mm. Depth of lip: 22.0 mm to 24.0 mm.

Flower longevity.—On the plant: 11 to 13 weeks.

Fragrance.—Absent.

Flower bud.—Average size: Large. Length: 24.0 mm to 26.0 mm. Width: 19.0 mm to 21.0 mm. Shape: Egg shaped. Color: Dark purple (RHS 187B and 72A).

Petals.—Arrangement: Almost touching. Shape: Semi-circular. Apex: Emarginated asymmetric. Margin: Entire. Length (from base to tip): 41.0 mm to 43.0 mm. Width: 54.0 mm to 56.0 mm. Color (when fully opened): Upper surface: Basic color: Purple (RHS 78A) with lighter center (RHS 78D) and darker base (RHS 78A). Over color: Light purple center (RHS 76C). Lower surface: Basic color: Purple (RHS 80B). Over color: Purple (RHS 76C).

Dorsal sepal.—Shape: Elliptic. Apex: Obtuse/rounded symmetric. Margin: Entire. Length (from base to tip): 41.0 mm to 43.0 mm. Width: 29.0 mm to 31.0 mm. Color (when fully opened): Upper surface: Basic color: Purple (RHS 78B) slightly striped and netted (RHS 78A) with purple base (RHS 78A). Over color: Absent. Lower surface: Basic color: Purple (RHS 78C). Over color: Absent.

Lateral sepals.—Shape: Ovate. Apex: Obtuse asymmetric. Margin: Entire. Length (from base to tip): 40.0 mm to 42.0 mm. Width: 24.0 mm to 26.0 mm. Color (when fully opened): Upper surface: Basic color: Purple (RHS 78B) slightly striped and netted (RHS 78A). Over color: Light green (RHS 145C). Lower surface: Basic color: Purple (RHS 78B and

78C). Over color: Light green (RHS 145D); stripe in the middle towards the base (RHS 146D).

Labellum (lip).—Margin: Entire. Whiskers: Present. Length of whiskers: 16.0 mm to 18.0 mm. Color of whiskers: Purple (RHS 78A) with small white tips (RHS 155C). Pubescence on the lip: Absent.

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. Length (from base to tip): 20.0 mm to 22.0 mm. Width: 15.0 mm to 17.0 mm. Color: Dark red-purple (RHS 185A) with purple edge (RHS 78A) and slightly yellow base (RHS 12A).

Apical lobe.—Shape: Triangular. Length: 19.0 mm to 21.0 mm. Width: 19.0 mm to 21.0 mm. Color: Purple (RHS 78A) and slightly yellow towards the base (RHS 12C).

Callus.—Average size: Medium. Height: 0.6 cm to 0.8 cm. Length: 0.6 cm to 0.8 cm. Width: 0.4 cm to 0.6 cm. Color: Yellow-orange (RHS 23A) dotted (RHS 173A).

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: 9.0 mm to 11.0 mm. Diameter: 5.7 mm to 5.9 mm. Color: Purple (RHS 78A to RHS 78B).

Pollinia.—Quantity: 2. Size: 1.0 mm to 1.2 mm. Color: Orange (RHS 24A).

Ovary.—Part of the pedicel with small ribs towards the column. Length: 7.0 mm to 9.0 mm. Diameter: 2.2 mm to 2.4 mm.

Pedicel.—Length: 34.0 mm to 36.0 mm. Diameter: 2.9 mm to 3.1 mm. Color: From the inflorescence greyed-purple on one side (RHS 183A); green (RHS 146D and 145B) and light purple (RHS 75D) towards the flower.

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 of about 30° C.

COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

The female parent plant '10007-0001' (unpatented) is unavailable for comparison.

'PHALDESBIM' differs from male parent plant '22790-0002' (unpatented) in that 'PHALDESBIM' has smaller flowers and shorter whiskers than '22790-0002'. Additionally, 'PHALDESBIM' has lateral sepals that are even at the base, whereas '22790-0002' has lateral sepals that are dotted at the base.

'PHALDESBIM' differs from commercial variety 'PHALBAZOKU' (unpatented) in that 'PHALDESBIM' has a lighter apical lobe of the lip and a lighter lateral lobe of the lip on the backside than 'PHALBAZOKU'. Additionally, 'PHALDESBIM' has longer whiskers than 'PHALBAZOKU'.

I claim:

1. A new and distinct variety of *Phalaenopsis* plant named 'PHALDESBIM' substantially as described and illustrated herein.

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FIG. 1

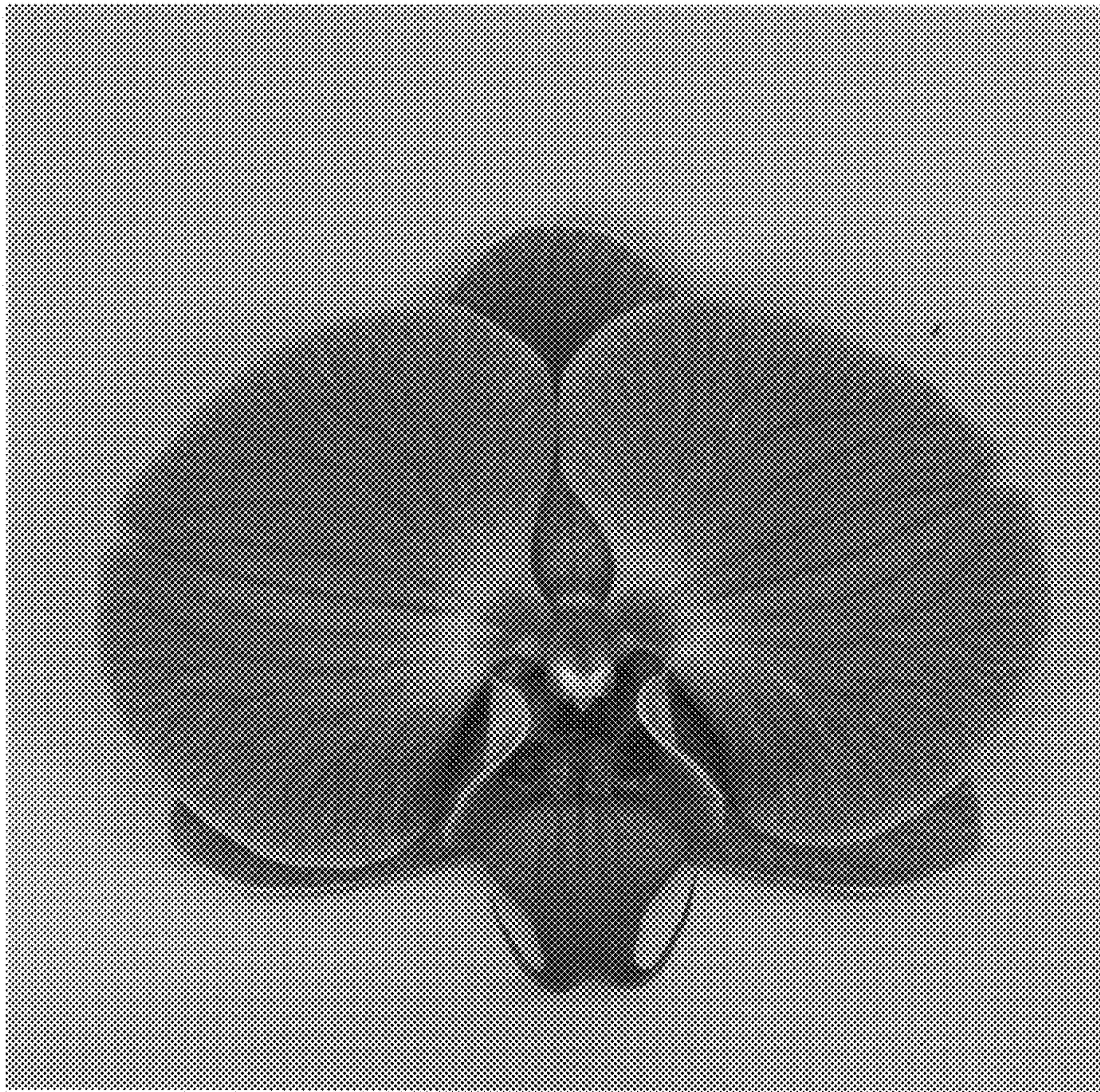


FIG. 2

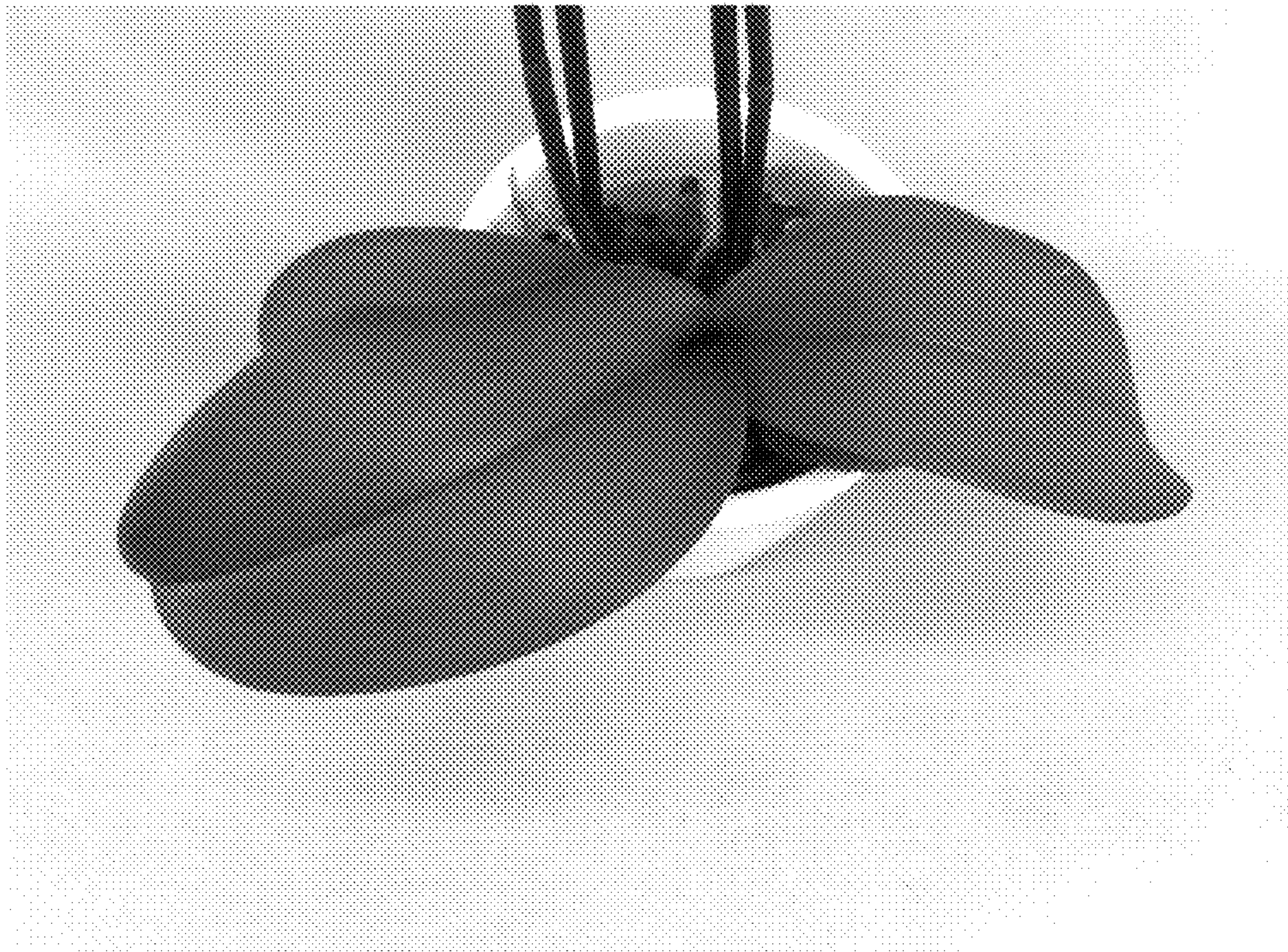


FIG. 3