US00PP32479P2

(12) **United States Plant Patent**
Van Swieten

(10) **Patent No.: US PP32,479 P2**
(45) **Date of Patent: Nov. 17, 2020**

(54) ***PHALAENOPSIS* ORCHID PLANT NAMED 'PHALGYQCO'**

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

(71) Applicant: **ANTHURA B.V.**, Bleiswijk (NL)

(72) Inventor: **Martinus Nicolaas Gerardus Van Swieten**, Utrecht (NL)

(73) Assignee: **Anthura B.V.**, Bleiswijk (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/873,351**

(22) Filed: **Mar. 26, 2020**

(51) **Int. Cl.**
A01H 5/02 (2018.01)
A01H 6/62 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./311**
CPC ***A01H 6/62*** (2018.05)

(58) **Field of Classification Search**
USPC Plt./311
CPC A01H 6/62
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

UPOV hit on a *Phalaenopsis* plant named, 'PHALGYQCO', QZ PBR 53019, Jun. 15, 2018.*

* cited by examiner

Primary Examiner — Anne Marie Grunberg
(74) *Attorney, Agent, or Firm* — Jondle & Associates, P.C.

(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named 'PHALGYQCO', particularly characterized by having white flowers with greenish-white lips and a concave shape, strong curvature of the lateral lobe, and is propagated by meristem tissue culture, is disclosed.

3 Drawing Sheets

1

Genus and species: *Phalaenopsis* hybrid.
Variety denomination: 'PHALGYQCO'.

BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct cultivar of *Phalaenopsis* plant, botanically known as *Phalaenopsis* hybrid of the Orchidaceae family, commonly referred to as moth orchid, and hereinafter referred to by the variety name 'PHALGYQCO'.

The new *Phalaenopsis* plant is a product of a planned breeding program conducted by the inventor in Bleiswijk, the Netherlands. The objective of this breeding program was to create a new *Phalaenopsis* plant with attractive white flowers with greenish-white lips, suitable for potted plant production.

The new *Phalaenopsis* plant 'PHALGYQCO' is a result of cross-pollination made by the inventor in December 2007 in Bleiswijk, the Netherlands, of the proprietary female, or seed parent, *Phalaenopsis* hybrid '01-1849' (unpatented) with the proprietary male, or pollen parent, *Phalaenopsis* hybrid '21232-01' (unpatented).

The new *Phalaenopsis* was selected by the inventor as a single plant within the progeny of the stated cross-pollination in a controlled greenhouse in Bleiswijk, the Netherlands, in June 2012. Asexual reproduction of the new *Phalaenopsis* plant by meristem tissue culture since 2015 in Bleiswijk, the Netherlands, has demonstrated that the new variety reproduces true to type with all of the characteristics, as herein described, firmly fixed and retained through successive generations.

Community Plant Variety Rights for this variety have been applied for in the European Union on Apr. 26, 2018, by

2

Applicant who obtained the subject matter disclosed directly from the inventor. 'PHALGYQCO' has not been made publicly available or sold anywhere in the world prior to the effective filing date of this application with the exception of sales or disclosures made one year or less before the effective filing date of this claimed invention by Applicant who obtained 'PHALGYQCO' directly from the inventor.

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, and can be used to distinguish 'PHALGYQCO' as a new and distinct variety of *Phalaenopsis* plant:

1) White flowers with greenish-white lips;
2) Concave flower shape; and
3) Strong curvature of the lateral lobe.

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 were taken in a greenhouse in Bleiswijk, the Netherlands, from 50-week-old plants in February 2020. Colors in the photographs may differ from the color values cited in the detailed botanical description, which accurately describe the actual colors of the new variety.

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

FIG. **2** shows a close-up of a flower of 'PHALGYQCO'.

FIG. **3** shows an overhead view of the leaves of 'PHALGYQCO'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALGYQCO'. Plants of the new *Phalaenopsis* have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, light intensity and day length, without, however, any variance in genotype. The chart used in the identification of colors described herein is The R.H.S. Colour Chart of The Royal Horticultural Society, London, England, 2015 edition, except where general color terms of ordinary significance are used. The color values were determined under 4000-6000 lux natural light in a greenhouse in Bleiswijk, the Netherlands. Observations and measurements were made in February 2020 on flowering plants which were planted in 12-centimeter (diameter) pots. After in vitro propagation, the plants were grown in nursery trays for 20-24 weeks, followed by transplantation to 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. Flowering occurs after 50 weeks in 12-centimeter pots.

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—Phalaenopsis hybrid.

Common name.—Moth orchid.

Variety name.—'PHALGYQCO'.

Parentage:

Female parent.—Phalaenopsis cultivar '01-1849' (unpatented).

Male parent.—Phalaenopsis cultivar '21232-01' (unpatented).

Propagation:

Type.—Meristem tissue culture.

Roots:

Root description.—Greyed-green (something between RHS 190B and 190C) colored roots with branching lateral roots having yellow-green (RHS 144C) colored root tips.

Plant:

Commercial crop time to flowering.—Following asexual propagation (in vitro), the rooted cuttings grow for 20-24 weeks. After transplantation into 12-cm pots, the plants are finished after 48 to 50 weeks.

Growth habit of the peduncle.—Upright to slightly pendent with raceme inflorescence.

Height (from soil level to top of inflorescence).—Approximately 49.0 cm to 54.0 cm.

Width (measured from leaf tips).—About 32.0 cm to 34.0 cm.

Vigor.—Strong.

Leaves:

Mature leaves.—Quantity per plant: 7 to 8 leaves are produced before flowering. Length (fully expanded): 18.0 cm to 20.0 cm. Width: 8.0 cm to 9.0 cm. Position of the broadest part of the leaf: Toward the apex. Shape: Obovate. Base shape: Moderately elongated. Apex: Unequal obtuse. Leaf blade angle with the petiole (measured from the horizontal position): Between 20 degrees and 40 degrees. Leaf margin: Entire. Color: Upper surface: RHS 146A. Lower surface: RHS 146B. Texture (both upper and lower surfaces): Smooth. Thickness: 2.0 mm to 3.0 mm. Variegation: Absent. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 146A. Lower surface: RHS 146B.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—9 to 12.

Length.—49.0 cm to 54.0 cm.

Diameter.—5.0 mm to 6.0 mm.

Strength.—Strong.

Aspect.—Upright to slightly pendent.

Texture.—Smooth.

Color.—Mix of yellow-green (RHS 146C) and brown (RHS N199B).

Internode length.—2.0 cm to 3.0 cm.

Inflorescence description:

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

Number of inflorescences.—1 to 2.

Inflorescence size.—Height (from base to tip): 160.0 mm to 210.0 mm.

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

Flower.—Height: 92.0 mm to 97.0 mm. Diameter: 100.0 mm to 105.0 mm. Depth of lip: 25.0 mm to 27.0 mm.

Flower longevity.—On the plant: 22 to 26 weeks.

Flower shape.—Concave.

Fragrance.—Absent.

Flower bud.—Average size: Large. Length: 25.0 mm to 27.0 mm. Width: 20.0 mm to 22.0 mm. Shape: Egg shaped. Color: Greenish-yellow (RHS 145B to 145C) with a touch of diluting purplish-red (RHS N77D).

Petals.—Arrangement: Open/free. Shape: Semi-circular. Apex: Rounded to slightly emarginated asymmetric. Margin: Entire. Length (from base to tip): 48.0 mm to 50.0 mm. Width: 58.0 mm to 60.0 mm. Position of the broadest part of the petal: Toward the base. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Absent. Number of spots and stripes on the petals (upper surface): None. Color of spots and stripes on the petals (upper surface): None. Density of netting of the petals (upper surface): None. Color of the netting (upper surface): None.

Dorsal sepal.—Shape: Elliptic. Apex: Obtuse symmetric. Margin: Entire. Length (from base to tip): 50.0 mm to 52.0 mm. Width: 35.0 mm to 37.0 mm. Position of the broadest part of the dorsal sepals: At the middle. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: Absent. Lower surface: Basic color: White (RHS NN155C). Over color: Very light purple (RHS 76B). Number of spots and stripes on the dorsal sepals (upper surface): None. Color of spots and stripes on the dorsal sepals (upper surface): None.

Density of netting of the dorsal sepals (upper surface): None. Color of the netting: None.

Lateral sepals.—Shape: Ovate. Apex: Obtuse asymmetric. Margin: Entire. Length (from base to tip): 52.0 mm to 54.0 mm. Width: 32.0 mm to 34.0 mm. Position of the broadest part of the lateral sepals: Toward the base. Color (when fully opened): Upper surface: Basic color: White (RHS NN155C). Over color: A hint of light yellow-green (RHS 145C) at the base. Lower surface: Basic color: White (RHS NN155C). Over color: A hint of light yellow-green (RHS 145D) at the base and light purple middle vein (RHS 76A) toward the tip. Number of spots and stripes on the lateral sepals (upper surface): None. Color of spots and stripes on the lateral sepals (upper surface): None. Density of netting of the lateral sepals (upper surface): None. Color of the netting (upper surface): None.

Labellum (*lip*).—Whiskers: Present. Length of whiskers: 19.0 mm to 21.0 mm. Color of whiskers: White (RHS NN155C) with yellow tips (RHS 8A). 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. Margin: Entire. Length: 21.0 mm to 23.0 mm. Width: 14.0 mm to 16.0 mm. Color: Upper surface: Greenish-yellow (RHS 151B) at one margin toward the base; white (RHS NN155C) toward the other margin. Lower surface: Greenish (RHS 151B) on one margin toward the base and white (RHS NN155C) toward the other margin. Number of spots and stripes on the lateral lobe: Few. Color of spots and stripes on the lateral lobe: RHS N170B and 178B. Density of netting of the lateral lobe: None. Color of the netting: None.

Apical lobe.—Shape: Triangular. Margin: Entire. Length: 20.0 mm to 22.0 mm. Width: 24.0 mm to 26.0 mm. Color: Upper surface: Orange-brown (RHS N170A) at the base; greenish-yellow wings (RHS 151C) and white (RHS NN155C) toward whiskers. Lower surface: Diluting greenish-yellow wings (RHS 151C); white (RHS NN155C) toward whiskers. Number of spots and stripes on the apical lobe: None. Color of spots and stripes on the apical lobe: None. Density of netting of the apical lobe: None. Color of the netting: None. Bump and ridge: Present.

Callus.—Average size: Large. Height: 0.7 cm to 0.8 cm. Length: 0.7 cm to 0.8 cm. Width: 0.4 cm to 0.5 cm. Color: Yellow (RHS 7B) and light greenish-yellow (RHS 4C) on sides; dotted RHS N170A.

Reproductive organs:

Column.—Length: 8.0 mm to 10.0 mm. Diameter: 6.0 mm to 7.0 mm. Color: White (RHS NN155C).

Pollinia.—Quantity: 2. Diameter: 1.1 mm to 1.3 mm. Color: Orange (RHS 25A).

Ovary.—Length: 10.0 mm to 12.0 mm. Diameter: 2.0 mm to 3.0 mm.

Pedicel.—Length: 37.0 mm to 39.0 mm. Diameter: 3.0 mm to 4.0 mm. Texture: Smooth. Color: Dark red (RHS 187A) at the base; light yellow-green (RHS 145B) with a hint of very light purple (RHS 76B) toward the flower.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed to pathogens and pests common to *Phalaenopsis* to date.

Fruit and seeds: Fruit and seed development has not been observed on plants of the new *Phalaenopsis* to date.

COMPARISON WITH PARENTAL LINES AND MOST SIMILAR VARIETIES

The female parent plant of 'PHALGYQCO', cultivar '01-1849' (unpatented), is no longer in existence, therefore a meaningful comparison cannot be made.

'PHALGYQCO' differs from male parent plant '21232-01' (unpatented) in that 'PHALGYQCO' has white whiskers with yellow tips and strong curvature of the lateral lobe, whereas '21232-01' has white whiskers and weak curvature of the lateral lobe. Additionally, 'PHALGYQCO' has longer whiskers than '21232-01'.

'PHALGYQCO' is most similar to the commercial *Phalaenopsis* plants named 'PHALFOWIC' (U.S. Plant Pat. No. 29,245) and 'PHALFUBNE' (U.S. Plant Pat. No. 30,395). 'PHALGYQCO' differs from the commercial variety 'PHALFOWIC' in that 'PHALGYQCO' has obovate leaves and white whiskers with yellow tips, whereas 'PHALFOWIC' has oblong leaves and greenish-yellow whiskers. Additionally, 'PHALGYQCO' has a shorter inflorescence than 'PHALFOWIC'.

'PHALGYQCO' differs from the commercial variety 'PHALFUBNE' in that 'PHALGYQCO' has flowers with a concave shape, whereas 'PHALFUBNE' has flowers with a convex to flat shape. Additionally, 'PHALGYQCO' has smaller flowers, shorter internodes, and shorter whiskers than 'PHALFUBNE'.

I claim:

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

* * * * *

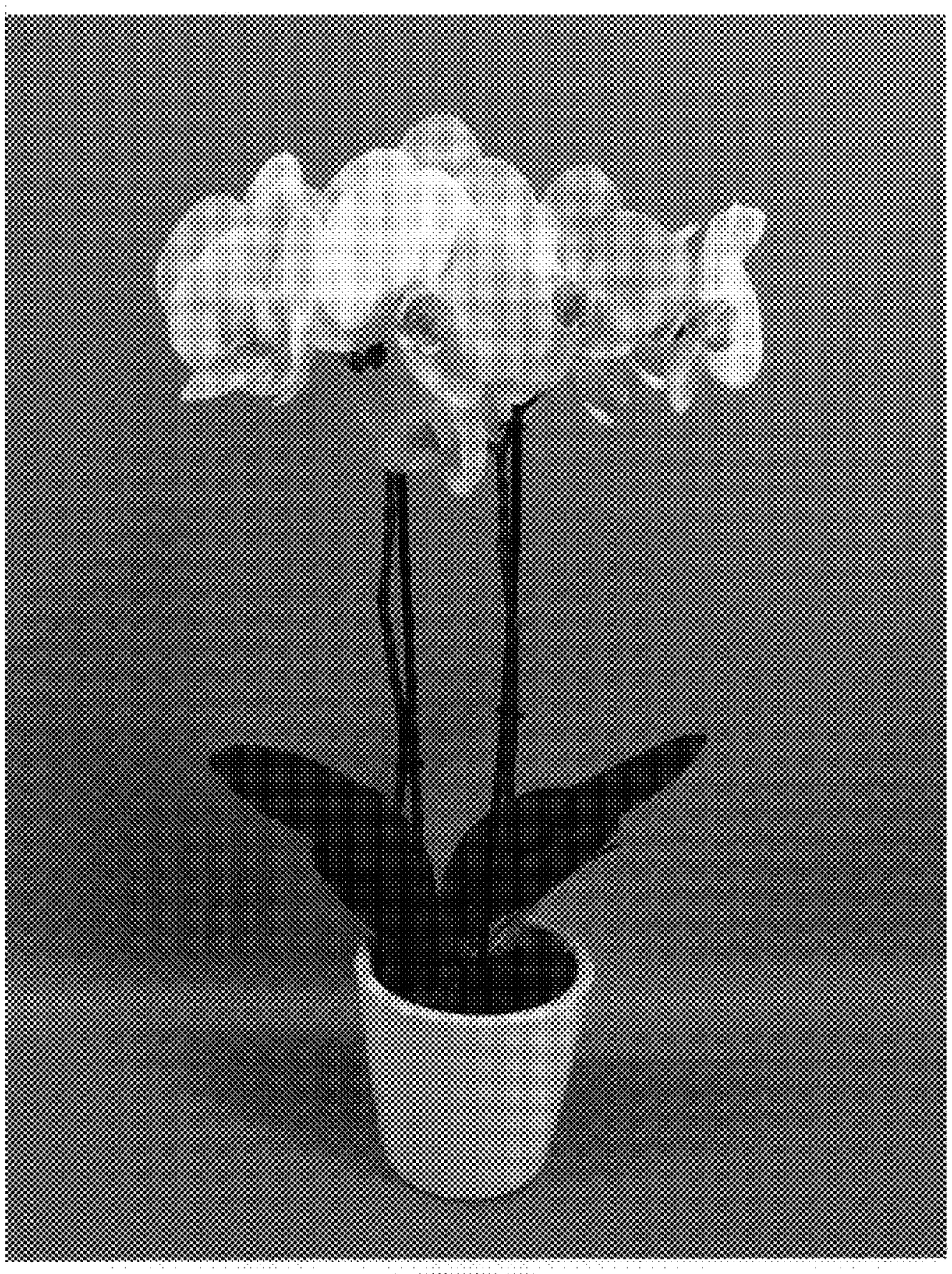

FIG. 1

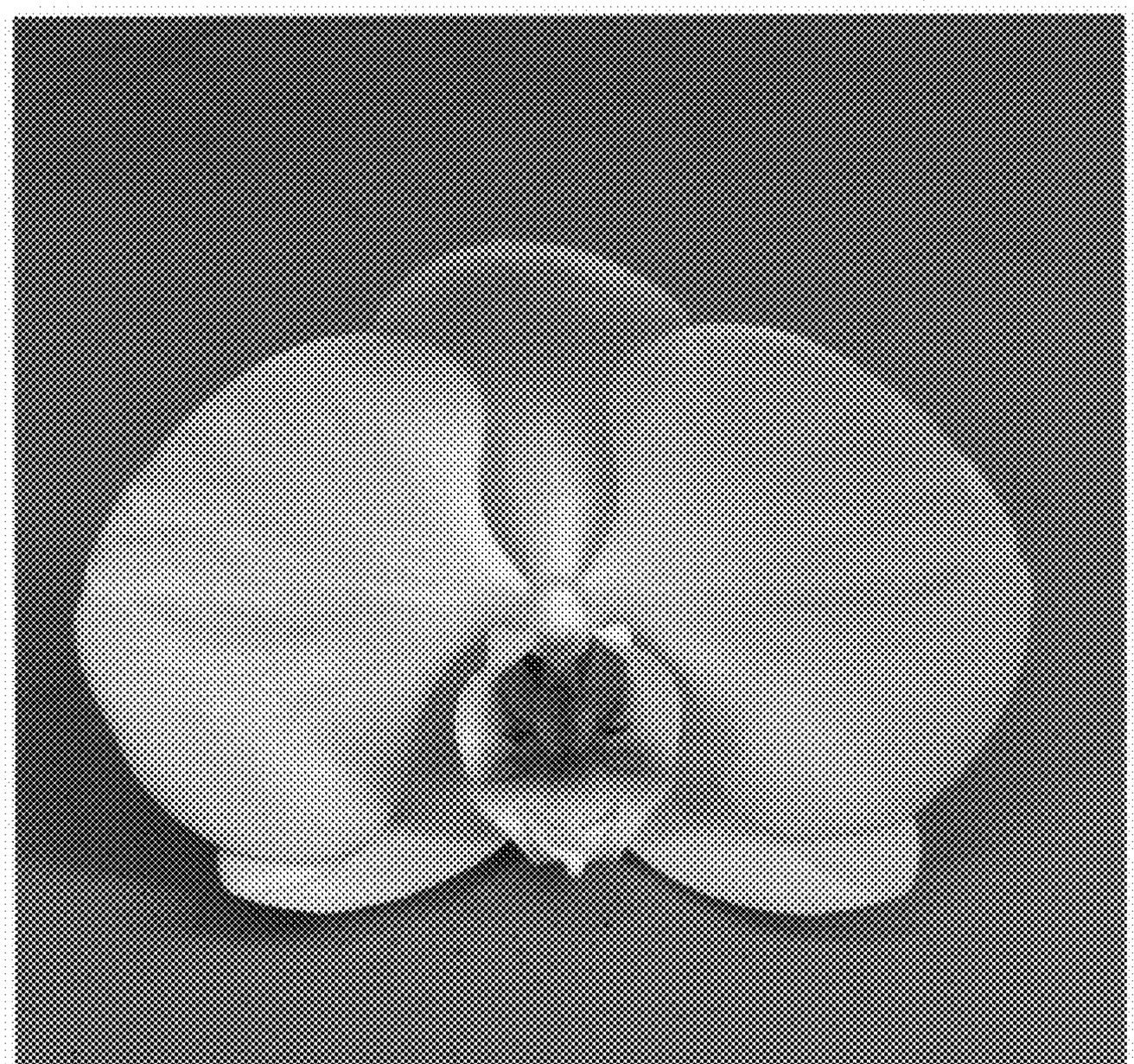

FIG. 2

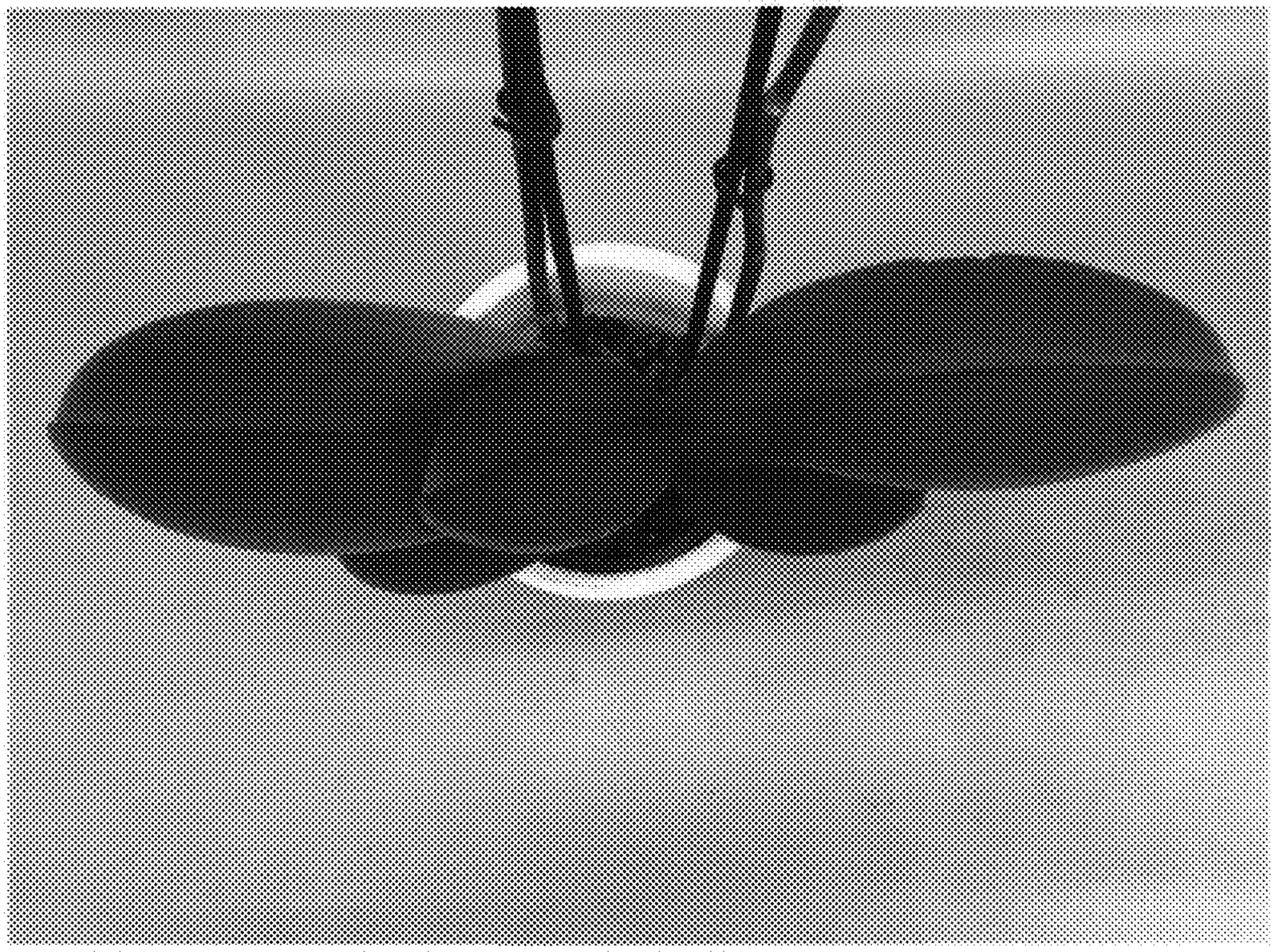

FIG. 3