US00PP32595P2

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

(10) **Patent No.: US PP32,595 P2**
(45) **Date of Patent: Dec. 8, 2020**

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

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

(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.: **16/873,566**

(22) Filed: **May 6, 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 *Phalaenopsis* plant named, 'PHALHOCH', QZ PBR 20190993, published Jun. 15, 2019.*
UPOV hit on *Phalaenopsis* plant named, 'PHALHOCH', QZ PBR 20200307, published Apr. 15, 2020.*

* 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 'PHALHOCH', particularly characterized by having yellow flowers with reddish-purple lips, a compact plant, concave flower shape in lateral view, apical lobes with a medium bump and ridge, and is propagated by meristem tissue culture, is disclosed.

3 Drawing Sheets

1

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

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 'PHALHOCH'.

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 numerous attractive and unique yellow flowers with reddish-purple lips, suitable for potted plant production.

The new *Phalaenopsis* plant 'PHALHOCH' is a result of cross-pollination made by the inventor in November 2010 in Bleiswijk, the Netherlands, of the proprietary female, or seed parent, *Phalaenopsis* hybrid '01-3705' (unpatented) with the proprietary male, or pollen parent, *Phalaenopsis* hybrid '19198-01' (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 January 2014. 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.

2

Community Plant Variety Rights for this variety have been applied for in the European Union on Apr. 16, 2019 (Application no. 2019/0993), and on Jan. 30, 2020 (Application no. 2020/0307), by Applicant who obtained the subject matter disclosed directly from the inventor. 'PHALHOCH' 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 'PHALHOCH' 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 'PHALHOCH' as a new and distinct variety of *Phalaenopsis* plant:

1) Yellow flowers with reddish-purple lips;
2) Compact plant;
3) Concave flower shape in lateral view; and
4) Apical lobes have a medium bump and ridge.

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 April 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 'PHALHOCH'.

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

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

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALHOCH'. 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 April 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.—'PHALHOCH'.

Parentage:

Female parent.—Phalaenopsis cultivar '01-3705' (unpatented).

Male parent.—Phalaenopsis cultivar '19198-01' (unpatented).

Propagation:

Type.—Meristem tissue culture.

Roots:

Root description.—Greyed-green (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 panicle inflorescence.

Height (from soil level to top of inflorescence).—Approximately 50.0 cm to 55.0 cm.

Width (measured from leaf tips).—About 27.0 cm to 30.0 cm.

Vigor.—Strong.

Leaves:

Mature leaves.—Quantity per plant: 7 to 9 leaves are produced before flowering. Length (fully expanded): 15.0 cm to 18.0 cm. Width: 5.0 cm to 6.0 cm. Position of the broadest part of the leaf: At the middle. Shape: Narrow oblong. Base shape: Moderately elongated. Apex: Obtuse asymmetric. Leaf blade angle with the petiole (measured from the horizontal position): Between 20 degrees and 35 degrees. Leaf margin: Entire. Color: Upper surface: RHS 146A with a touch of brown margin (RHS 200A) toward the tip. Lower surface: RHS 146B with a touch of brown (RHS 200B) toward the tip. Texture (both upper and lower surfaces): Smooth. Thickness: 1.8 mm to 2.2 mm. Variegation: Absent. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 200B. Lower surface: RHS 200C.

Peduncle:

Quantity per plant.—1 to 3.

Number of flowers per peduncle.—10 to 14.

Length.—50.0 cm to 55.0 cm.

Diameter.—5.8 mm to 6.3 mm.

Strength.—Strong.

Aspect.—Upright to slightly pendent.

Texture.—Smooth.

Color.—Green (RHS 146C) with a touch of brown (RHS 200C) and toward the inflorescence (RHS 200D).

Internode length.—3.0 cm to 4.0 cm.

Inflorescence description:

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

Number of inflorescences.—1 to 3.

Inflorescence size.—Height (from base to tip): 200.0 mm to 230.0 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: 80.0 mm to 85.0 mm. Depth of lip: 21.0 mm to 23.0 mm.

Flower longevity.—On the plant: 16 to 18 weeks.

Flower shape.—Concave.

Fragrance.—Absent.

Flower bud.—Average size: Medium to large. Length: 23.0 mm to 25.0 mm. Width: 19.0 mm to 21.0 mm. Shape: Egg shaped. Color: Yellowish-green (RHS N144A) with a touch of red (RHS 176A).

Petals.—Arrangement: Open/free. Shape: Semi-circular. Apex: Rounded to slightly emarginated asymmetric. Margin: Slightly undulated. Length (from base to tip): 38.0 mm to 40.0 mm. Width: 42.0 mm to 44.0 mm. Position of the broadest part of the petal: Toward the base. Color (when fully opened): Upper surface: Basic color: Yellow (RHS 10A). Over color: Absent. Lower surface: Basic color: Light yellow (RHS 10B). 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 to slightly emarginated symmetric. Margin: Entire.

Length (from base to tip): 41.0 mm to 43.0 mm. Width: 31.0 mm to 33.0 mm. Position of the broadest part of the dorsal sepals: At the middle. Color (when fully opened): Upper surface: Basic color: Yellow (RHS 10A). Over color: Hint of purplish-pink (RHS N78C) at the base. Lower surface: Basic color: Light greenish-yellow (RHS 8B). Over color: Absent. 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 (upper surface): None.

Lateral sepals.—Shape: Ovate. Apex: Obtuse asymmetric. Margin: Entire. Length (from base to tip): 38.0 mm to 40.0 mm. Width: 29.0 mm to 31.0 mm. Position of the broadest part of the lateral sepals: Toward the base. Color (when fully opened): Upper surface: Basic color: Yellow (RHS 10A). Over color: Greenish-yellow (RHS 4A) at the base. Lower surface: Basic color: Mix of light greenish-yellow (RHS 4B) and light yellow (RHS 10C). Over color: Hint of purplish-red (RHS 185C) at the base. Number of spots, dots, and stripes on the lateral sepals (upper surface): Medium number of very small dots at the base. Color of spots, dots, and stripes on the lateral sepals (upper surface): RHS 185B. Density of netting of the lateral sepals (upper surface): None. Color of the netting (upper surface): None.

Labellum (*lip*).—Whiskers: Present. Length of whiskers: 4.0 mm to 6.0 mm. Color of whiskers: Purplish-pink (RHS N78C) with light yellow tips (RHS 10C). Pubescence on the lip: Absent.

Lateral lobe.—Shape: Type IV (as described in the International Union for the Protection of New Varieties of Plants (UPOV) Test Guidelines for *Phalaenopsis*); weakly spatulate. Margin: Slightly undulated. Length: 15.0 mm to 17.0 mm. Width: 9.0 mm to 11.0 mm. Color: Upper surface: Slightly yellow (RHS 13A) at the base; red (RHS 185A) on one side toward the margin; reddish-purple (RHS N78A) toward the other margin. Lower surface: White (RHS 155C) at the base; at the middle (RHS N78A) and red (RHS 185A) toward the margin. Number of spots and stripes on the lateral lobe: Few stripes at the base. Color of spots and stripes on the lateral lobe: RHS 184A. Density of netting of the lateral lobe: None. Color of the netting: None.

Apical lobe.—Shape: Elliptic. Margin: Entire. Length: 20.0 mm to 22.0 mm. Width: 14.0 mm to 16.0 mm. Color: Upper surface: Red (RHS 185A to 185B) at the base; reddish-purple (RHS N78B) and white (RHS NN155C) toward whiskers. Lower surface: Mix of yellow (RHS 13A) and red (RHS 180A) toward the margin; light purple (RHS 76A to 76B) at the middle and 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: Medium.

Callus.—Average size: Small. Height: 4.0 mm to 5.0 mm. Length: 4.0 mm to 5.0 mm. Width: 3.0 mm to 4.0 mm. Color: Yellow (RHS 13A); dotted (RHS 175A).

Reproductive organs:

Column.—Length: 9.0 mm to 11.0 mm. Diameter: 4.0 mm to 5.0 mm. Color: White (RHS NN155C).

Pollinia.—Quantity: 2. Diameter: 0.5 mm to 0.8 mm. Color: Orange-yellow (RHS 23A).

Ovary.—Length: 10.0 mm to 12.0 mm. Diameter: 2.0 mm to 2.2 mm.

Pedicel.—Length: 36.0 mm to 38.0 mm. Diameter: 2.4 mm to 2.6 mm. Texture: Smooth. Color: Brown (RHS 200D) at the base; light yellow-green (RHS 145C) and (RHS 145D) 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

'PHALHOCH' differs from female parent plant '01-3705' (unpatented) in that 'PHALHOCH' has an even flower pattern, weakly spatulate lateral lobes, and elliptic apical lobes, whereas '01-3705' has a striped flower pattern, spatulate lateral lobes, and ovate apical lobes.

'PHALHOCH' differs from male parent plant '19198-01' (unpatented) in that 'PHALHOCH' has an even flower pattern, weakly spatulate lateral lobes, elliptic apical lobes, and whiskers, whereas '19198-01' has a flecked flower pattern, ligulate lateral lobes, rhombic apical lobes, and no whiskers.

'PHALHOCH' is most similar to the commercial *Phalaenopsis* plants named 'PHALEKDEK' (U.S. Plant Pat. No. 32,024) and 'PHALFOBOK' (unpatented). 'PHALHOCH' differs from the commercial variety 'PHALEKDEK' in that 'PHALHOCH' has weakly spatulate lateral lobes and elliptic apical lobes, whereas 'PHALEKDEK' has spatulate lateral lobes and triangular apical lobes. Additionally, 'PHALHOCH' has smaller flowers and shorter whiskers than 'PHALEKDEK'.

'PHALHOCH' differs from the commercial variety 'PHALFOBOK' in that 'PHALHOCH' has weakly spatulate lateral lobes, elliptic apical lobes, and whiskers, whereas 'PHALFOBOK' has oblong lateral lobes, ovate apical lobes, and no whiskers. Additionally, 'PHALHOCH' has larger flowers than 'PHALFOBOK'.

I claim:

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

* * * * *

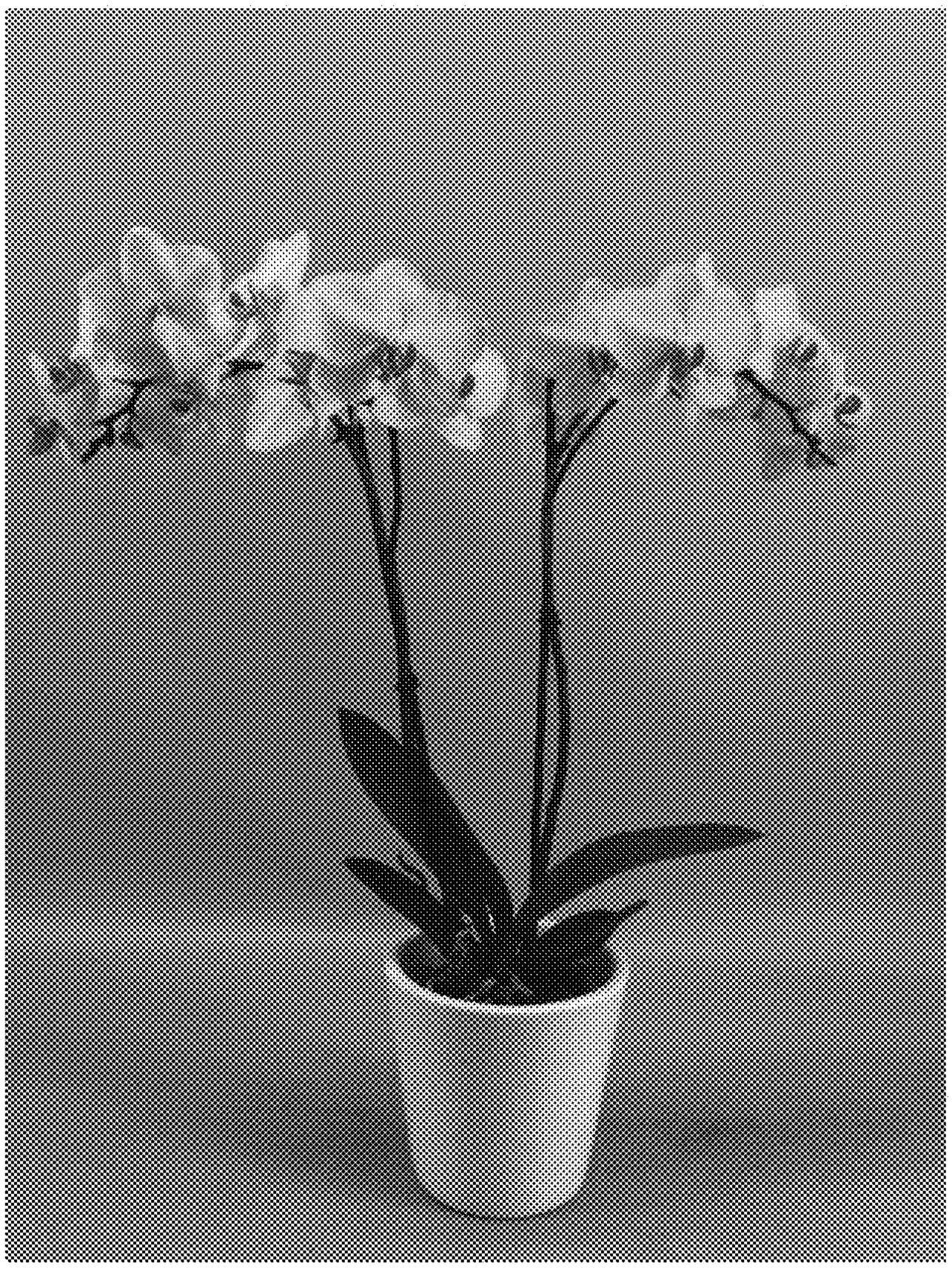

FIG. 1

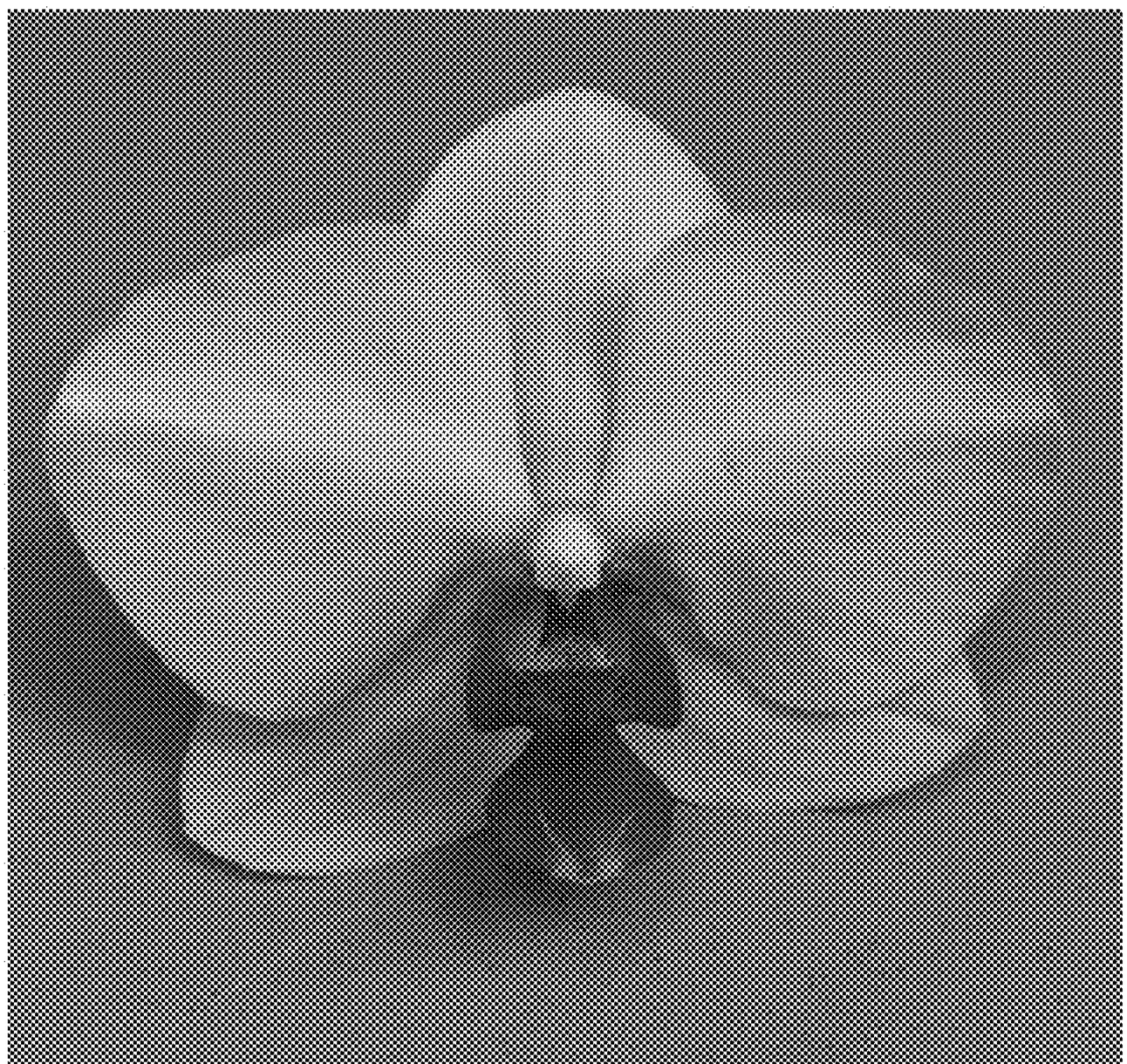

FIG. 2

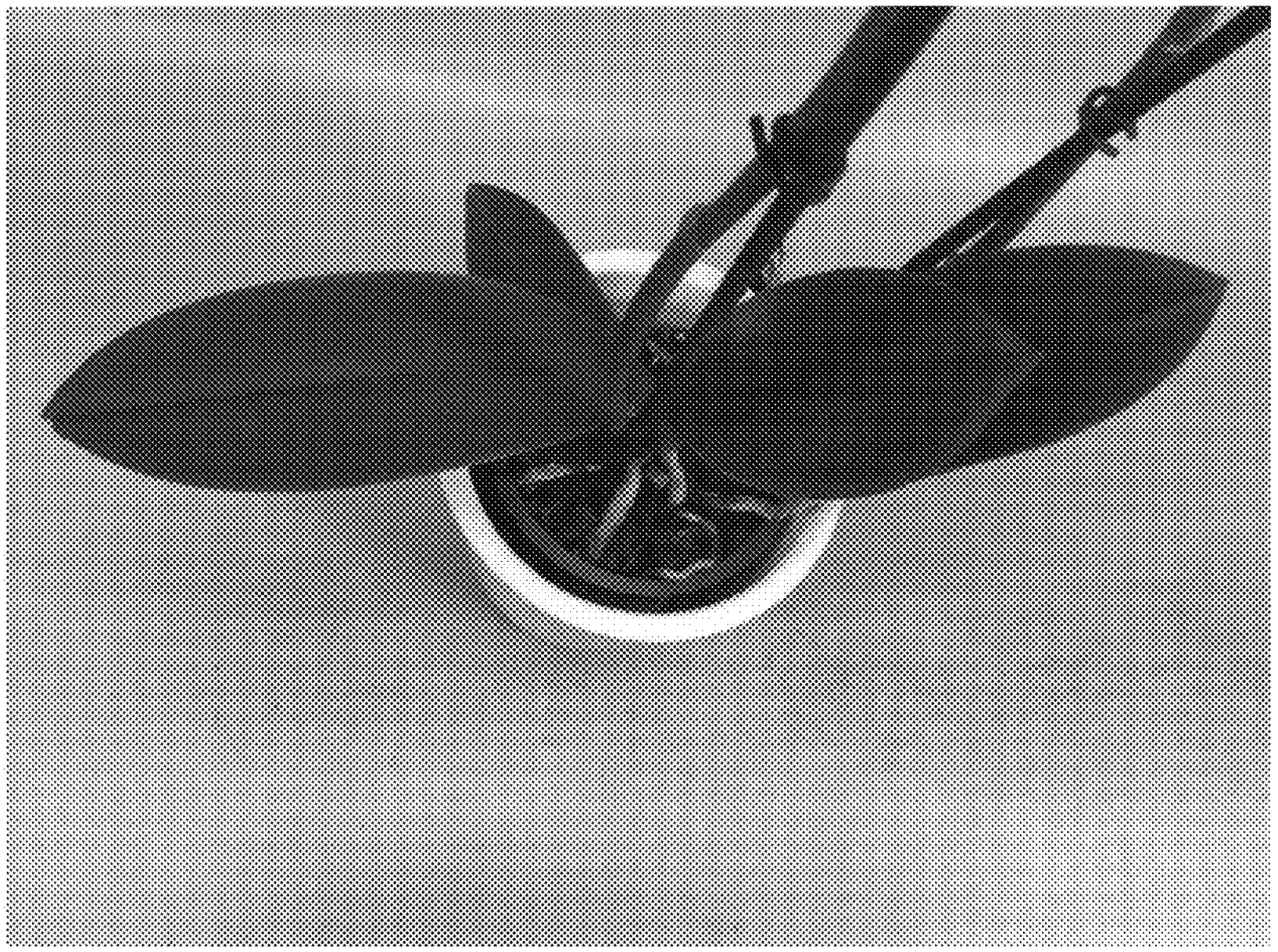

FIG. 3