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(12) **United States Plant Patent**
Schoone(10) **Patent No.:** US PP27,851 P3
(45) **Date of Patent:** Apr. 4, 2017(54) **PHALAENOPSIS ORCHID PLANT NAMED 'SUMMERSONG'**(50) Latin Name: *Phalaenopsis hybrida*
Varietal Denomination: Summersong(71) Applicant: **Floricultura**, Heemskerk (NL)(72) Inventor: **René Schoone**, Assendelft (NL)(73) Assignee: **Floricultura**, Heemskerk (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 63 days.

(21) Appl. No.: **14/545,328**(22) Filed: **Apr. 23, 2015**(65) **Prior Publication Data**

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(30) **Foreign Application Priority Data**

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(51) **Int. Cl.**
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.*Primary Examiner* — Susan McCormick Ewoldt(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP;
Sunit Talapatra(57) **ABSTRACT**

A new and distinct *Phalaenopsis* plant named 'Summersong' particularly characterized by flowers which are yellow with purple/violet and a red/purple labellum; plants which may be propagated economically and uniformly using tissue culture; plants which produce more than one inflorescence; long and sturdy inflorescences; and relatively short, dark-green foliage.

3 Drawing Sheets**1**

Latin name of the genus and species of the plant claimed:
Phalaenopsis hybrida.

Variety denomination: 'Summersong'.

BACKGROUND OF THE INVENTION

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

Phalaenopsis comprises a genus of about 55 species of herbaceous perennials many of which, or the hybrids thereof, are suitable for cultivation 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 5 to 8 inches to over 2 feet. 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 petal, 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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5 *Phalaenopsis* orchids are typically propagated from seeds. Asexual propagation of *Phalaenopsis* is often done from off-shoots which frequently arise from the lower bracts of the inflorescence. The resulting plants are detached from the mother plant and may be planted in a suitable substrate.

10 The new *Phalaenopsis* 'Summersong' is a product of a controlled breeding program conducted by the inventor, René Schoone, in Strengweg, Heemskerk, The Netherlands. The objective of the breeding program was to develop a new *Phalaenopsis* cultivar particularly characterized by its attractive and unique colored flowers, economical propagation via tissue culture, rapid growth, and a plant dimension suitable for packaging and shipping to the market.

15 The new *Phalaenopsis* 'Summersong' originated from a cross made by the inventor in 2001 in Strengweg, Heemskerk, The Netherlands. The female or seed parent is the *Phalaenopsis* cultivar designated 'Sunrise Delight', unpatented. The male or pollen parent is the *Phalaenopsis* cultivar designated 'Little Hatter', unpatented. The new *Phalaenopsis* 'Summersong' was discovered and selected 20 by the inventor as a single flowering plant within the progeny of the stated cross in a controlled environment in 2009 in Strengweg, Heemskerk, The Netherlands.

25 Asexual reproduction of the new *Phalaenopsis* cultivar by tissue culture (mericloning) was first performed in November, 2009 in Cieweg 13, Heemskerk, The Netherlands, and has demonstrated that the combination of characteristics as herein disclosed for the new cultivar are firmly fixed and retained through successive generations of asexual reproduction. The new cultivar asexually reproduces true-to-type.

30 BRIEF DESCRIPTION OF THE INVENTION

30 The following traits have been repeatedly observed and are determined to be unique characteristics of 'Summer-

song', which in combination distinguish this *Phalaenopsis* as a new and distinct cultivar:

1. flowers which are yellow with purple/violet and darker purple/violet stripes and a red/purple labellum;
2. plant produces more than one inflorescence;
3. plants may be propagated economically and uniformly using tissue culture;
4. inflorescences are long and sturdy, and
5. relatively short, dark-green foliage.

In comparison with the parental cultivars of 'Summersong', the female parent 'Sunrise Delight' is yellow/orange with darker stripes/spots and pink in the labellum, the male parent 'Little Hatter' is white with a red labellum, whereas the flowers of 'Summersong' are yellow with purple/violet and darker purple/violet stripes and a red/purple labellum. 10

Presently, the commercial cultivar to which 'Summersong' can be meaningfully compared is 'Be Fortune' (U.S. application Ser. No. 14/545,327). The flowers of 'Be Fortune' (U.S. application Ser. No. 14/545,327) are red/purple and greyed/purple with wide yellow edges and a red/purple 20 labellum, whereas the flowers of 'Summersong' are yellow with purple/violet and darker purple/violet stripes and a red/purple labellum

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Phalaenopsis* 'Summersong' showing the colors as true as is reasonably possible with colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description, which accurately describe the color of 'Summersong'.

FIG. 1 shows a side view perspective of a typical flowering plant of 'Summersong' in a 12 cm pot, at 16 months 35 of age.

FIG. 2 shows a close-up view of the typical flower of 'Summersong'.

FIG. 3 shows a close-up view of the typical leaves of 'Summersong'. 40

DETAILED BOTANICAL DESCRIPTION

The new *Phalaenopsis* cultivar 'Summersong' has not been observed under all possible environmental conditions. 45 The phenotype of the new cultivar may vary with variations in environment such as temperature, light intensity, and day length without any change in the genotype of the plant.

The aforementioned photographs, together with the following observations, measurements and values describe plants of 'Summersong' as grown in a greenhouse in Stengwegen, Heemskerk, The Netherlands, under conditions which closely approximate those generally used in commercial practice. Initially, the ideal temperature to grow plants of 'Summersong' is 27° C. during the day and at night. Then, 50 during the flowering phase of 'Summersong', the ideal growing temperature is 20-22° C. during the day and 18° C. at night. Light levels for growing 'Summersong' are a minimum of 5,000 lux and a maximum of 10,000 lux. A balanced fertilizer with level of 200 ppm N, 87 ppm P, 168 55 ppm K is applied. Duration of growth of 'Summersong' from potting size is between 10 and 14 months.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), 2007 edition, except where general colors of ordinary significance are used. Color 60 values were taken under daylight conditions at approxi-

mately noon in Zaandammerweg, Assendelft, The Netherlands. The age of the 'Summersong' plants described is 12 months after potting.

Classification:

Botanical.—*Phalaenopsis hybrida*.

Parentage:

Female or seed parent.—*Phalaenopsis* cultivar designated 'Sunrise Delight', unpatented.

Male or pollen parent.—*Phalaenopsis* cultivar designated 'Little Hatter', unpatented.

Propagation:

Type.—Tissue culture.

Rooting habit and description.—Fleshy; approximately between 3 and 4 mm wide and greyed/green in color (RHS 191A); freely branching. It takes 12 weeks for plants growing in tissue culture to initiate roots.

Plant:

Size at maturity.—Height (from bottom of pot to highest flower): about 50 cm. Spread: about 40 cm.

Growth habit.—Small; green leaves (RHS 137A) and a relatively normal raceme.

Vigor.—Moderate.

Crop time.—Following asexual propagation, at about 26 weeks 2 leaves appear; at about 30 weeks 3-4 leaves appear; after a cold treatment of about 4-8 weeks at a temperature of about 19° C. about 1-3 racemes with flowers appear.

Foliage:

Quantity per plant.—About 6-12 leaves are produced before flowering.

Arrangement and attachment.—Alternate/clasping.

Overall shape of leaf.—Oval; the tip is blunt and asymmetric.

Texture (upper & underside).—Smooth and leathery.

Pubescence.—None.

Mature leaf length.—About 17 cm.

Mature leaf width.—About 9 cm.

Mature leaf thickness.—About 2 mm.

Mature leaf color.—Upper side: green (RHS 137A). Under side: green (RHS 137C).

Leaf base.—Acute.

Margin.—Entire.

Venation.—Pattern: parallel. Color of midvein: upper side: green (RHS N137A). Under side: green (RHS 137B and RHS 137C).

Inflorescence description:

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

Raceme.—Quantity per plant: about 1 to 3. Number of flowers per raceme: about 10 to 25. Number of flowers per peduncle: about 3 to 5. Length: about 40-45 cm. Width: about 4 mm.

Pedicel.—Diameter: about 3 mm. Strength: strong. Aspect: upright. Texture: glabrous and smooth. Color: green (RHS 137B) with grey/green (RHS 197A). Internode: Length: about 30 mm.

Buds.—Height (from base to tip): about 17 mm. Diameter (at midpoint): about 16 mm. Shape: oval/egg-shaped with a bump on one side. Color: yellow/green (RHS 145A and RHS 145B) with a red/purple haze (RHS 70A). Orientation: same as flowers (forward facing).

Flowering time.—For an untreated plant (flowering plant that has not undergone cold-treatment where the plant grows at a temperature of 18° C. to 19° C. for about 4 to 8 weeks after a period of about 30 weeks at a temperature of 25° C.), 1-3 racemes appear with flower buds and flowers. First flowers can be expected approximately 4 to 6 months after planting a plant with a leaf diameter of 3 to 5 cm. Flowers persistent. 5

Flowering longevity.—On the plant: about 4 to 6 months; lastingness of cut flowers: has not been observed. 10

Fragrance.—No fragrance.

Flower.—Rate of opening: Flowers fully opened about 2 to 3 days after petal and sepal separation. Orientation at opening: slanted upward and outward. Shape: Typical shape of *Phalaenopsis*, see FIG. 2. Size (of single bloom): Height: about 55 mm. Diameter: about 50 mm. Quantity and arrangement: three petals and three sepals that are trimerous, overlapping and arranged in 2 whorls. Petals are more pronounced than sepals. 15 20

Petals.—Arrangement: Inner whorl comprises 3 petals: 2 lateral petals and labellum. 2 lateral petals: Overall shape: broadly ovate and weakly cupped. Apex: oval. Margin: entire and weakly undulate. Base: broadly ovate. Length: about 26 mm. Width: about 22 mm. Texture: Upper surface: smooth and satiny. Under surface: smooth and satiny. Color (when fully opened): upper side: purple/violet (RHS N80B) with darker stripes (RHS N80A). The edges are yellow (RHS 2D). Under side: The edges and in the center yellow (RHS 2D) and the rest is purple/violet (RHS N80B and RHS N80C). Labellum: Overall shape: 3-lobed with 2 prominent callosities at central junction of the lateral lobes and base of the midlobe. Lateral lobes of labellum fold upward about the column; the midlobe extends forward and is terminated by 2 stubs appendages at the apex. Lateral lobes of the labellum are ovate in shape while the midlobe is triangular with a bump and a rib on it. Margin: entire and weakly undulate. Apex: oval. Length: about 20 mm. Width (not flattened): about 18 mm. Depth of tube created by lateral lobes of labellum: about 5 mm. Texture: Upper & under surface: smooth and satiny. Color (when fully opened): Midlobe, upper side: at the base yellow (RHS 13A). Main color is red/purple (RHS 59A) which runs into red/purple (RHS 72A) with at the end a yellow haze (RHS 13A). Under side: From the base and in the center white (RHS NN155C) and little yellow (RHS 13B) also yellow at the upper 25 30 35 40 45 50

edges. Further red/purple (RHS 59A) and RHS 72A. Lateral lobes, upper side: At the base white (RHS NN155C) and a yellow haze (RHS 13A). Also some yellow at the outer edges (RHS 13A). In the center red/purple (RHS 59A) stripes and red/purple (RHS 72A). Under side: white (RHS NN155C) and at the upper edge red/purple (RHS 72A). Cirrhi: about 0,5 mm. Color: white (RHS NN155D). Pestle (Callosities): Length: about 4 mm. Width (not flattened): about 5 mm. Color: yellow (RHS 13B) with red/purple spots (RHS 59A).

Sepals.—Arrangement: Outer whorl comprises 3 sepals, one dorsal and two lateral sepals. Overall shape: elliptical and weakly cupped. Margin: entire and weakly undulate. Length: about 27 mm. Width: about 20 mm. Apex: oval, little pointy.

Texture.—Upper and under surface: smooth and satiny. *Color (when fully opened).*—Upper side, dorsal: purple/violet (RHS N80B) with red/violet stripes (RHS N80A). Edges, tip and in the center yellow/green (RHS 145C and RHS 145D). Lateral: purple/violet (RHS N80B) with red/violet stripes (RHS N80A). Edges, tip and in the center yellow/green (RHS 145C). Under side, dorsal and lateral: yellow/green (RHS 145D and RHS 150D).

Pedicel.—Length: about 30 mm. Diameter: about 3 mm. Texture: glabrous and smooth. Color: starting at the flower white (RHS NN155D) which runs into yellow/green (RHS 144A).

30 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 a 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. The plant has not produced seed.

Column.—Length: about 9 mm. Diameter: about 4 mm. Color: red/purple (RHS 70B).

Pollinia.—Quantity: two. Diameter: about 1 mm. Color: yellow/orange (RHS 23A).

Ovary.—Length: about 3 mm. Diameter: about 4 mm. Color: white (RHS NN155D).

Disease/pest resistance/susceptibility: No specific resistance or susceptibility observed.

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

What is claimed is:

1. A new and distinct *Phalaenopsis* plant named ‘Summersong’, as illustrated and described herein.

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FIG. 1

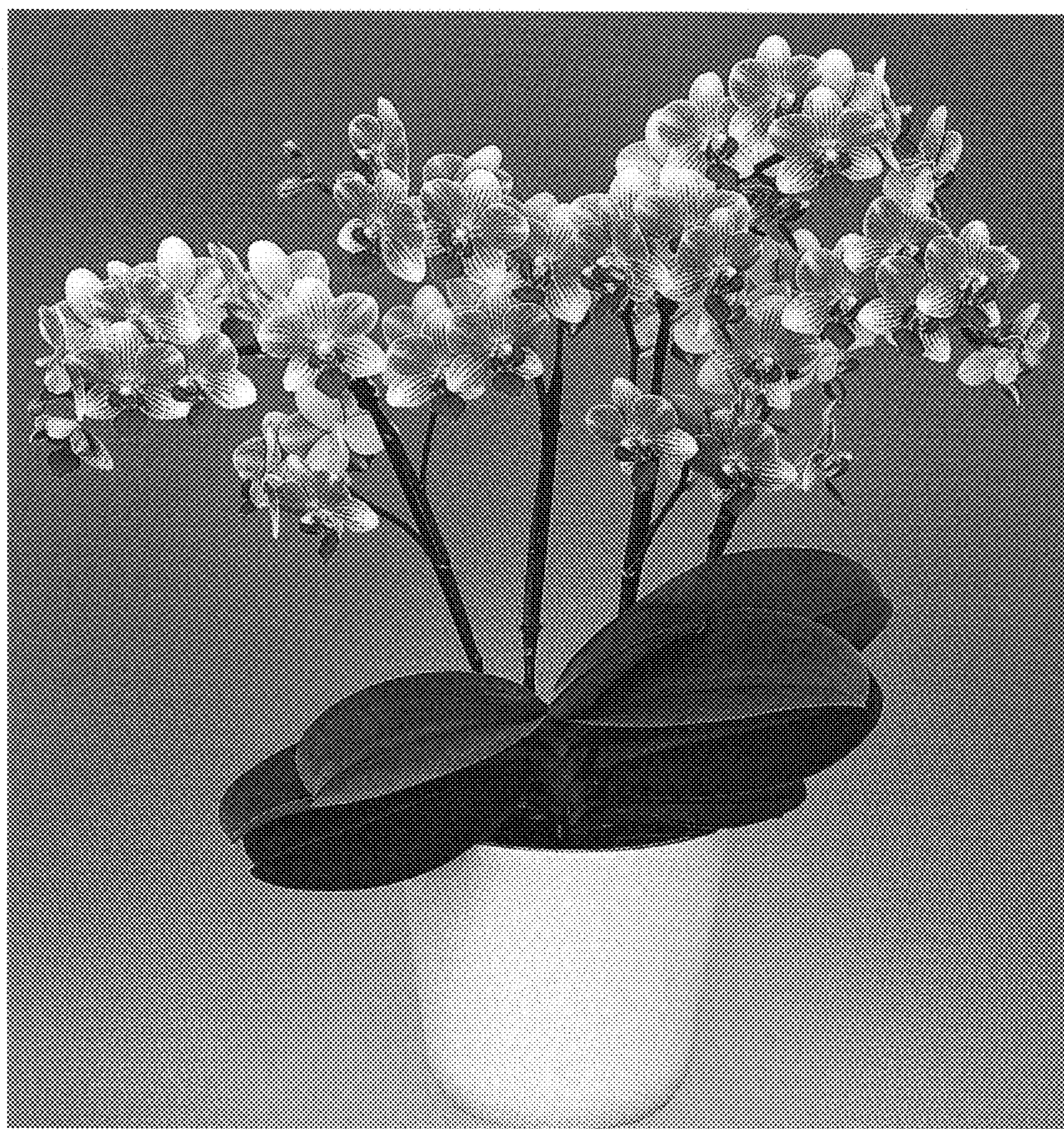


FIG. 2

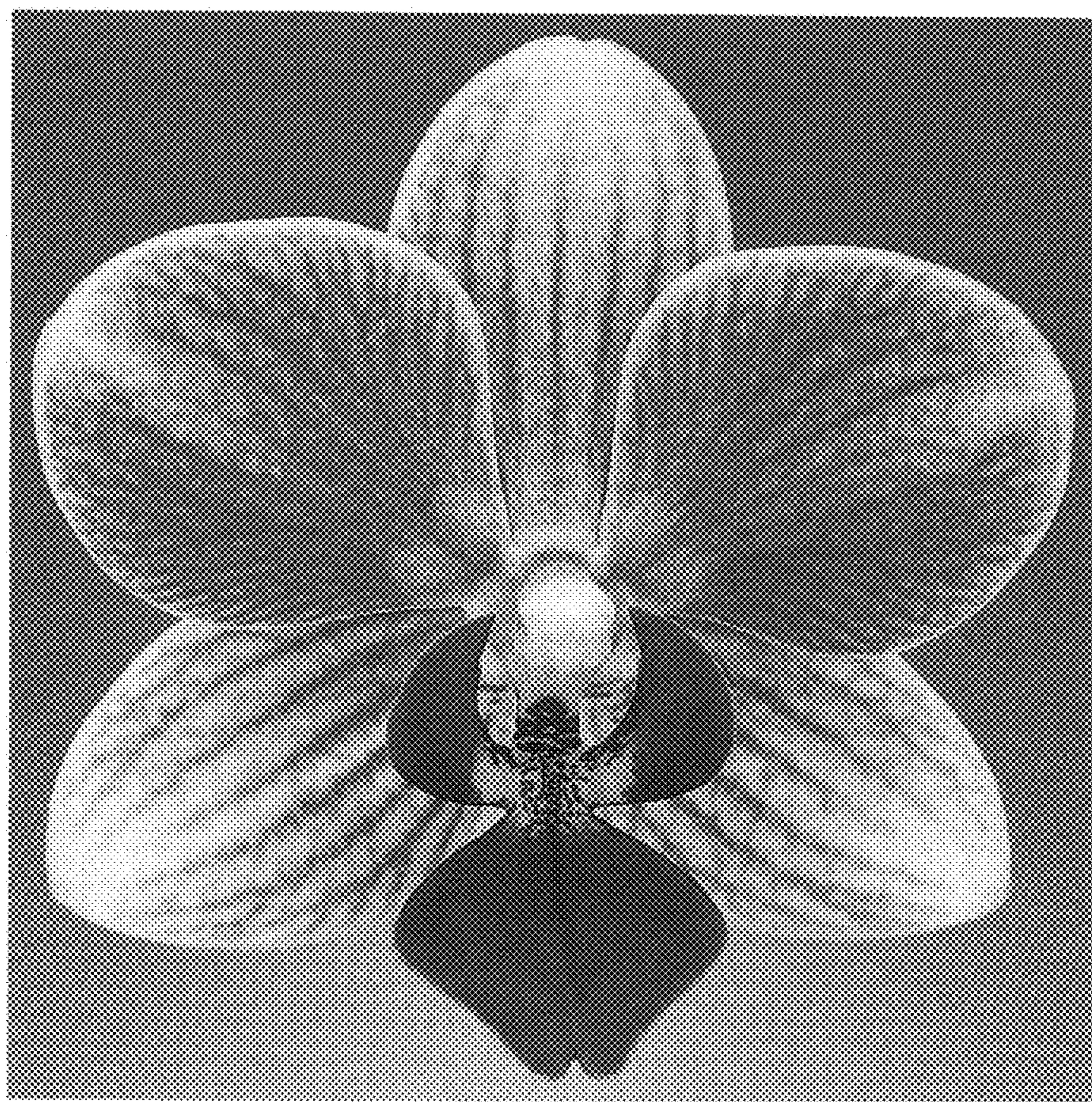


FIG. 3

