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(12) **United States Plant Patent**  
**Schoone**(10) **Patent No.:** US PP26,885 P3  
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- (54) **PHALAENOPSIS ORCHID PLANT NAMED 'BIRDIE'**
- (50) Latin Name: *Phalaenopsis hybrida*  
Varietal Denomination: **Birdie**
- (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 137 days.

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<b>Foreign Application Priority Data</b>	
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(52) <b>U.S. Cl.</b>	
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	See application file for complete search history.

*Primary Examiner* — June Hwu(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP; Sunit Talapatra**ABSTRACT**

A new and distinct *Phalaenopsis* plant named 'Birdie' particularly characterized by flowers which are white and purple/violet with purple/violet veins and a purple/violet 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: 'Birdie'.

**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 'Birdie'.

*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.

*Phalaenopsis* orchids are typically propagated from seeds. Asexual propagation of *Phalaenopsis* is often done from

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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.

The new *Phalaenopsis* 'Birdie' 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.

The new *Phalaenopsis* 'Birdie' originated from a cross made by the inventor in 2000 in Strengweg, Heemskerk, The Netherlands. The female or seed parent is the *Phalaenopsis* cultivar designated 'Mem. Gordon Aamoth Junior', unpatented. The male or pollen parent is the *Phalaenopsis* cultivar designated 'Snow Leopard', unpatented. The new *Phalaenopsis* 'Birdie' was discovered and selected by the inventor as a single flowering plant within the progeny of the stated cross in a controlled environment in 2008 in Strengweg, Heemskerk, The Netherlands.

Asexual reproduction of the new *Phalaenopsis* cultivar by tissue culture (mericloning) was first performed in November, 2008 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.

**BRIEF DESCRIPTION OF THE INVENTION**

The following traits have been repeatedly observed and are determined to be unique characteristics of 'Birdie', which in combination distinguish this *Phalaenopsis* as a new and distinct cultivar:

1. flowers which are white and purple/violet with purple/violet veins and a purple/violet 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 'Birdie', the female parent 'Mem. Gordon Aamoth Junior' has purple with yellow flowers, the male parent 'Snow Leopard' has white colored flowers with purple marks and a yellow/red labellum, whereas the flowers of 'Birdie' are white and purple/violet with purple/violet veins and a purple/violet labellum

Presently, the commercial cultivar to which 'Birdie' can be meaningfully compared is 'Valley Buzz' (U.S. Plant patent application Ser. No. 14/545,295). The color purple/violet in the flowers of 'Birdie' is lighter than the purple/violet in the flowers of 'Valley Buzz'. Furthermore, 'Birdie' has a purple/violet labellum, whereas the labellum of 'Valley Buzz' is purple.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Phalaenopsis* 'Birdie' 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 'Birdie'.

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

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

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

#### DETAILED BOTANICAL DESCRIPTION

The new *Phalaenopsis* cultivar 'Birdie' has not been observed under all possible environmental conditions. 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 'Birdie' as grown in a greenhouse in Strengweg, Heemskerk, The Netherlands, under conditions which closely approximate those generally used in commercial practice. Initially, the ideal temperature to grow plants of 'Birdie' is 27° C. during the day and at night. Then, during the flowering phase of 'Birdie', the ideal growing temperature is 20-22° C. during the day and 18° C. at night. Light levels for growing 'Birdie' 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 ppm K is applied. Duration of growth of 'Birdie' 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 values were taken under daylight conditions at approximately noon in Zaandammerweg, Assendelft, The Netherlands. The age of the 'Birdie' plants described is 12 months after potting.

#### Classification:

*Botanical*.—*Phalaenopsis hybrida*.

#### Parentage:

*Female or seed parent*.—*Phalaenopsis* cultivar designated 'Mem. Gordon Aamoth Junior', unpatented.

*Male or pollen parent*.—*Phalaenopsis* cultivar designated 'Snow Leopard', unpatented.

#### Propagation:

*Type*.—Tissue culture (mericloning).

*Rooting habit and description*.—Fleshy; approximately 4 mm-7 mm wide and greyed/green in color (RHS 194A); 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 40 cm. Spread: about 35 to 50 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 2 to 5 racemes with flowers appear.

#### Foliage:

*Quantity per plant*.—About 8 to 12 leaves are produced before flowering.

*Arrangement and attachment*.—Alternate, clasping.

*Overall shape of leaf*.—Oval, narrow and tip is little pointy.

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

*Pubescence*.—None.

*Mature leaf length*.—About 13 to 19 cm.

*Mature leaf width*.—About 6 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 137A). Under side: green (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 2 to 5.

*Number of flowers per raceme*.—About 30.

*Length*.—About 35 to 40 cm.

*Peduncle*.—Diameter: about 5 mm. Strength: strong. Aspect: upright. Texture: glabrous and smooth. Color: brown (RHS 200A) with yellow/green spots (RHS 146D).

*Buds*.—Height (from base to tip): about 18 mm. Diameter (at midpoint): about 12 mm. Shape: oval with a bump on the side. Color: purple (RHS N79D) with purple veins (RHS N79B) and some yellow/green (RHS 145C).

*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.), 2 to 5 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. *Flowering longevity.*—On the plant: about 4 to 6 months; lastingness of cut flowers: has not been observed.<sup>5</sup>

*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 40 mm. Diameter: about 45 mm. Quantity and arrangement: three petals and three sepals that are trimerous and arranged in 2 overlapping whorls. Inner whorls of 3 petals is comprised of 2 lateral petals and a labellum. Petals are more pronounced than sepals.<sup>10</sup>

*Petals.*—2 lateral petals: Overall shape: broadly ovate, little triangular and weakly cupped. Apex: oval/round, little pointy. Margin: entire and weakly undulate. Base: broadly ovate. Length: about 22 mm. Width: about 22 mm. Texture: Upper surface: smooth and satiny. Under surface: smooth and satiny. Color (when fully opened): upper side: A small white edge all around (RHS NN155C). Further purple/violet (RHS N81D) with purple/violet veins (RHS N81A). Under side: A small white edge all around (RHS NN155C); rest is purple/violet (RHS N81D) with purple/violet veins (RHS N81B and RHS N81A).<sup>15</sup> 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 short 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 midlobe: about 15 mm. Width midlobe (not flattened): about 15 mm. Length lateral lobes: about 15 mm. Width of the lateral lobes: about 10 mm.<sup>20</sup> Texture: Upper and under surface: smooth and satiny. Color (when fully opened): Midlobe upper side: purple/violet (RHS N81A), at the base a red/purple haze on top of that (RHS 60A). Under side: Main color is purple/violet (RHS N81A). From base in center a white stripe (RHS N155A) which runs into purple (RHS 77C). At the base also two yellow/green spots (RHS 145D). The upper edges are purple (RHS N79A). Lateral lobes, upper side: At the base upper edge is white (RHS NN155C) with at the beginning some yellow (RHS 9B) and red/purple stripes/spots (RHS 59A). Under edge first little purple (RHS N79B) and then purple/violet (RHS N81A). Under<sup>25</sup>

side: At the base upper edge is white (RHS NN155B). Under edge is purple (RHS N79B). Both colors run into purple/violet (RHS N81A). At the base on the white also some red/purple stripes (RHS 59A). Cirrhi: small (about 1 mm). Color: purple/violet (RHS N81A). Pestle (Callosities): Length: about 3 mm. Width (not flattened): about 4 mm. Pubescence: None. Color: some white on the sides (RHS NN155B); rest is yellow (RHS 6A) with purple spots (RHS N79C).<sup>30</sup>

*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 23 mm. Width: about 16 mm. Apex: oval/little pointy. Texture: Upper and under surface: smooth and satiny. Color (when fully opened): Upper side: Dorsal: small white edge all around (RHS NN155C). Rest is red/purple (RHS 69C) with purple/violet veins (RHS N81A and RHS N81B). Lateral: white (RHS NN155C) with purple/violet veins and purple/violet spots at the base (RHS N81A and RHS N81B). Under side: Dorsal and lateral: small white edge all around (RHS NN155C). Rest is purple/violet (RHS N81C and RHS N81D) with purple/violet veins (RHS N81A).<sup>35</sup>

*Pedicel.*—Length: about 22 mm. Diameter: about 2 mm. Texture: glabrous and smooth. Color: purple/violet (RHS N80C) which runs into RHS N80B and after that in greyed/purple (RHS N187B) and at the end RHS N187A.<sup>40</sup>

#### 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.<sup>45</sup>

*Column.*—Length: about 8 mm. Diameter: about 4 mm. Color: purple/violet (RHS N81A) which runs into RHS N81D.<sup>50</sup>

*Pollinia.*—Quantity: two. Diameter: about 1 mm. Color: orange (RHS 24A).

*Ovary.*—Length: about 3 mm. Diameter: about 4 mm. Color: white (RHS N155B).

*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.

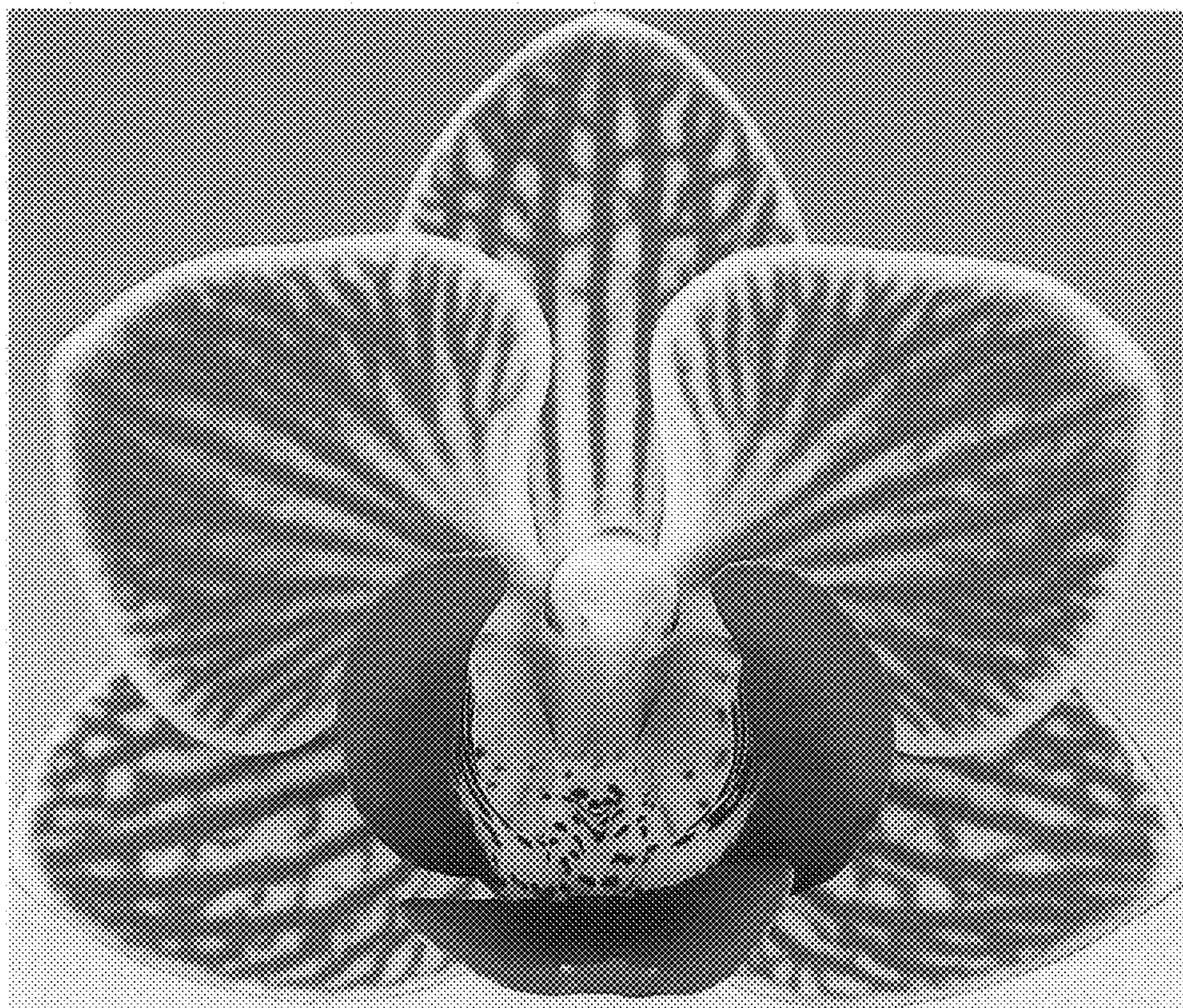
*What is claimed is:*

1. A new and distinct *Phalaenopsis* plant named 'Birdie', as illustrated and described herein.

**FIG. 1**



**FIG. 2**



**FIG. 3**

