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**Plate**

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(54) **PHALAEOPSIS PLANT NAMED ‘EXOTIC FLAME’**

(50) Latin Name: *Phalaenopsis* sp. *Orchid*  
Varietal Denomination: **Exotic Flame**

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patent is extended or adjusted under 35  
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(57) **ABSTRACT**

A new and distinct cultivar of *Phalaenopsis* plant named  
‘Exotic Flame’, characterized by its yellow-colored flowers  
with red purple-colored venation and speckles and red  
purple-colored labellum; freely flowering habit; upright,  
freely branching and sturdy flowering stems, and excellent  
postproduction longevity.

**1 Drawing Sheet**

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Botanical classification/cultivar designation: *Phalaenopsis* sp. *Orchid* cultivar *Exotic Flame*.

**BACKGROUND OF THE INVENTION**

The present invention comprises a new and distinct cul-  
tivar of *Phalaenopsis* *Orchid*, and hereinafter referred to by  
the cultivar name, *Exotic Flame*.

The new cultivar is a product of a planned breeding  
program conducted by the Inventor in Bremen, Germany.  
The objective of the breeding program is to create new  
uniform pot-type *Phalaenopsis* *Orchid* cultivars having  
attractive flower coloration.

The new cultivar was discovered by the Inventor from  
within the progeny of a cross-pollination of two unidentified  
proprietary selections of *Phalaenopsis* *Orchids*, not patented,  
on Nov. 28, 1997, in a controlled environment in Bremen,  
Germany.

Asexual propagation by tissue culture in a laboratory in  
Bremen, Germany has been used to increase the number of  
plants for evaluation and has demonstrated that the unique  
combination of characteristics as herein disclosed for the  
new *Phalaenopsis* *Orchid* are firmly fixed and are retained  
through successive generations of asexual reproduction.

**SUMMARY OF THE INVENTION**

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

1. Yellow-colored flowers with red purple-colored vena-  
tion and speckles and red purple-colored labellum.
2. Freely flowering habit.
3. Upright, freely branching and sturdy flowering stems.
4. Excellent postproduction longevity.

Plants of the new cultivar differ primarily from plants of  
the parent cultivars in flower color.

Plants of the new *Phalaenopsis* *Orchid* can be compared  
to plants of the cultivar *Nopsya*, disclosed in U.S. Plant Pat.  
No. 10,682. In side-side comparisons conducted in Bremen,  
Germany, plants of the new *Phalaenopsis* *Orchid* differed

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from plants of the cultivar *Nopsya* in the following charac-  
teristics:

1. Plants of the new *Phalaenopsis* *Orchid* were smaller  
than plants of the cultivar *Nopsya*.
2. Plants of the new *Phalaenopsis* *Orchid* had larger and  
darker green-colored leaves than plants of the cultivar  
*Nopsya*.
3. Plants of the new *Phalaenopsis* *Orchid* were more  
freely flowering than plants of the cultivar *Nopsya*.
4. Plants of the new *Phalaenopsis* *Orchid* had larger  
inflorescences with more flowers per inflorescence than  
plants of the cultivar *Nopsya*.
5. Plants of the new *Phalaenopsis* *Orchid* had slightly  
smaller flowers than plants of the cultivar *Nopsya*.
6. Plants of the new *Phalaenopsis* *Orchid* and the cultivar  
*Nopsya* differed in flower color.

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

Colors in the photograph may appear different from the  
color values that appear in the detailed botanical description  
which more accurately describe the new cultivar.

The photograph at the top is a close-up view of typical  
inflorescences of the new cultivar.

The photograph at the bottom is a close-up view of a  
typical flower of the new cultivar.

**DETAILED BOTANICAL DESCRIPTION**

Plants of the new cultivar have not been observed under  
all possible environmental conditions. The phenotype may  
vary significantly with variations in environment such as  
temperature and light intensity, without however, any  
change in genotype. In the following description, color  
references are made to The Royal Horticultural Society  
Colour Chart, 1995 Edition, except where general terms of  
ordinary dictionary significance are used.

Plants used for the aforementioned photographs and fol-  
lowing detailed botanical description were 11 months old  
and grown in 12-cm containers in Bremen, Germany, in a  
glass-covered greenhouse with day temperatures about 23 to



26° C., night temperatures about 22 to 25° C., and light levels about 18,000 lux. The photographs and the detailed botanical description were taken during the winter.

Botanical classification: *Phalaenopsis* cultivar Exotic Flame.  
Parentage:

*Female, or seed, parent.*—Unidentified proprietary selection of *Phalaenopsis*, not patented.

*Male, or pollen, parent.*—Unidentified proprietary selection of *Phalaenopsis*, not patented.

Propagation:

*Type.*—Asexual propagation by tissue culture.

*Time to initiate and elongate roots.*—Summer and winter: About 56 days at 25° C.

*Time to produce a fully rooted young plant.*—Summer: About 175 days at 25° C. Winter: About 189 days at 25° C.

*Root description.*—Very thick, fleshy, and greenish white in color.

Plant description:

*Form.*—Two-ranked leaves affixed to a short central stem (monopodial growth). Single flowers arranged on upright and sturdy flowering racemes.

*Plant height, soil level to top of foliar plane.*—About 21 to 25 cm.

*Plant height, soil level to top of inflorescences.*—About 45 to 50 cm.

*Plant diameter.*—About 30 to 35 cm.

*Foliage description.*—Leaves simple, opposite; sessile. Quantity per plant: About six. Length: About 20 to 25 cm. Width: About 9 to 11 cm. Shape: Elliptic, elongated. Apex: Obtuse and rounded. Base: Cuneate. Margin: Entire. Aspect: Mostly flat and folded upward from the midrib. Texture, upper and lower surfaces: Leathery, thick, glabrous. Venation: Parallel; veins are sunken within the lamina. Color: Young and mature foliage, upper surface: 147A, slightly glossy. Young and mature foliage, lower surface: 147A. Veins, upper and lower surfaces: Same as lamina.

Flower description:

*Flower type and habit.*—Single zygomorphic flowers arranged in racemes; flowers roughly pentagonal in shape. Flowering stems, upright, freely branching and sturdy. Plants freely flowering; plants typically produce one to three branched flowering stems with at least 20 to 25 flowers each. Flowers not fragrant. Flowers persistent. Flowers facing mostly outward.

*Natural flowering season.*—From January to April in northern Germany. Plants begin flowering about nine months after planting.

*Post-production longevity.*—Plants of the new *Phalaenopsis* Orchid maintain good leaf and flower substance for about three to six months on the plant under interior environmental conditions. Cut flowers of the new *Phalaenopsis* Orchid maintain good substance for about three to four weeks.

*Inflorescence length.*—About 30 to 35 cm.

*Inflorescence diameter.*—About 12 to 15 cm.

*Flower diameter.*—About 7 cm.

*Flower depth.*—About 2.5 cm.

*Flower buds.*—Shape: Ovoid. Length: About 1.5 to 2 cm. Width: About 8 to 15 mm. Color: 184A.

*Petals.*—Quantity/type: Three per flower; lateral petals similar in size and shape; the lowermost petal, the labellum, is deeply three-lobed. Lateral petals:

Length: About 3.3 cm. Diameter: About 2.7 cm. Shape: Broadly ovate. Apex: Rounded. Base: Attenuate; fused with the column. Margin: Entire. Texture, upper and lower surfaces: Velvety, silky; smooth. Color: When opening and fully opened, upper surface: 2D, with red purple, 71A, venation and random speckles. When opening and fully opened, lower surface: 2D, with red purple, 71B, venation. Labellum: Length, not flattened: About 2 cm. Diameter, not flattened: About 1.5 cm. Shape: Deeply three-lobed with two prominent callosities on the upper surface at the central junction of the lateral lobes and base of the midlobe. The lateral lobes fold upward about the column, the midlobe extends forward and is terminated by two twisted filiform appendages (about 3 mm in length) at the apex. Callosities length: About 4 mm. Callosities width: About 4 mm. Texture, upper and lower surfaces: Velvety, silky; smooth. Color: When opening and fully opened, upper surface: Lateral lobes: 187B; towards the base, yellow, 13A, streaks. Midlobe: 59A. Callosities: 13A. Central area: Close to 155D with purple, 187B, streaks and speckles. When opening and fully opened, lower surface: Lateral lobes: Close to 155D; lateral margins, 61A. Midlobe: 61A; towards base, 72B.

*Sepals.*—Quantity: Three per flower. Length: About 3.6 cm. Diameter: About 2.2 cm. Shape: Elliptic to ovate. Apex: Rounded. Base: Attenuate; fused with the petals and column. Margin: Entire. Texture, upper and lower surfaces: Velvety; smooth. Color: When opening and fully opened, upper surface: 2D, with red purple, 71A, venation and random speckles. When opening and fully opened, lower surface: 2D, with red purple, 71B, venation.

*Peduncles.*—Length: About 45 to 50 cm. Diameter: About 5 mm. Aspect: Upright. Strength: Strong, sturdy. Texture: Smooth, glabrous. Color: 187A.

*Pedicels.*—Length: About 3 cm. Diameter: About 3 mm. Aspect: About 75° from vertical. Strength: Strong. Texture: Smooth, glabrous. Color: 157A with dark purple, 187A, random streaks.

*Reproductive organs.*—Arrangement: Stamens and pistils fused into a column. Anthers with pollen grains united into pollinia. Stigma situated under the column and behind the pollinia. Ovary inferior with three carpels. Column: Length: About 1 cm. Diameter: About 5 mm. Color: 74C; towards the apex, 155D. Pollinia: Quantity of pollen masses: Two. Diameter: About 9 mm. Color: 23A. Stigma: Shape: Rounded, concave. Length: About 4 mm. Diameter: About 4 mm. Color: 155D. Ovary: Length: About 7 mm. Diameter: About 2.5 mm. Color: 148C.

*Seed/fruit.*—Seed and fruit production has not been observed.

Disease/pest resistance: Resistance to known pathogens and pests common to *Phalaenopsis* Orchids has not been observed on plants of the new cultivar grown under commercial greenhouse conditions.

Temperature tolerance: Plants of the new *Phalaenopsis* Orchid have been observed to be tolerant to temperatures from about 14 to 32° C.

It is claimed:

1. A new and distinct cultivar of *Phalaenopsis* plant named 'Exotic Flame', as illustrated and described.

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