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Hansen

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(54) ***PHLOX* PLANT NAMED 'OPENING ACT WHITE'**

(50) Latin Name: ***Phlox* hybrid**
Varietal Denomination: **Opening Act White**

(71) Applicant: **Hans A. Hansen**, Zeeland, MI (US)

(72) Inventor: **Hans A. Hansen**, Zeeland, MI (US)

(73) Assignee: **Walters Gardens Inc**, Zeeland, MI (US)

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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct plant cultivar of garden *phlox* named *Phlox* 'Opening Act Blush' with sweet-smelling white flowers on broad strong mostly upright stems over a long period beginning early June and reblooming into October. The foliage is highly powdery mildew resistant and the new plant is especially suitable in the garden as a specimen or en masse, potted plant or patio, for color, fragrance and attracting hummingbirds and butterflies, and for cut flower arrangements.

1 Drawing Sheet

Botanical classification: *Phlox* hybrid.
Variety denomination: 'Opening Act White'.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct variety of hybrid garden *phlox* botanically known as *Phlox* hybrid, and hereinafter referred to by the cultivar name 'Opening Act White'. The new variety originated from a crossing made by the inventor on Sep. 1, 2011 at a wholesale perennial nursery in Zeeland, Mich., USA between the female parent *Phlox* 'Minnie Pearl' (not patented) and the male parent *Phlox paniculata* 'Barsixtytwo' U.S. Plant Pat. No. 22,234 with seed harvested Oct. 6, 2011. 'Minnie Pearl' is an interspecific cross between *Phlox maculata* and *Phlox glaberrima*. The new plant was selected from among a large population of as a single individually developed seedling and then separately designated under the breeder code H11-98-22 with final evaluations approved in the summer of 2013.

Phlox 'Opening Act White' has been asexually propagated by stem cuttings at the same nursery in Zeeland, Mich. The unique characteristics of the new plant have been found to be reproducible and stable in successive generations of asexual propagation and the resultant plants have been found to be identical to the original selection. The present invention has been found to retain its distinctive characteristics through successive asexual propagations via vegetative cuttings.

Phlox 'Opening Act White' has not been made publically available or sold anywhere in the world under any name more than one year prior to the filing of this application. Any public disclosure or sale has been by the inventor or one who obtained the material either directly or indirectly from the inventor, and any such disclosure has not been made more than one year prior to the application of this invention.

SUMMARY OF THE INVENTION

Phlox 'Opening Act White' is unique from all other garden *phlox* known to the inventor. Other similar white-

flowering *phlox* plants include *Phlox paniculata* 'David', 'Pixie Twinkle' (not patented) and *Phlox* INTENSIA® 'White'. Compared to the female parent *Phlox* 'Minnie Pearl', the new plant blooms for a much longer period, and the foliage is longer and wider. The new plant also has a more compact and less running habit, and has flower petals that are more imbricate than 'Minnie Pearl'. Compared to the male parent, 'Barsixtytwo' is more coral red in flower color, has larger and taller flower panicles with less branching, and does not have the extended bloom period of 'Opening Act Blush'. Table 1 below compares 'Opening Act Blush' with other *Phlox paniculata* and hybrid cultivars of similar flower color. *Phlox*×*arendsii* 'Miss Jill', 'Daniele', 'David', 'Delta Snow', 'Dunbar Creek', *Phlox maculata* 'Eden's Glory' and 'Miss Universe' are all non-patented plants.

TABLE 1

CULTIVAR	FLOWER COLOR	FLOWER SIZE	Beginning Flower timing	HEIGHT	MILDEW RESISTANCE
x *arendsii* 'Miss Jill'	white, pink eye	20 mm	early-Jul-mid-Sep.	100 cm	fair
'Danielle'	white	32 mm	late-Jun-early-Sep.	115 cm	good
'David'	white	32 mm	early-Jul-late-Sep.	100 cm	excellent
'Delta Snow'	white, purple eye	25 mm	early-Jul-mid-Sep.	130 cm	good
'Dunbar Creek'	white, no eye	20 mm	early-July-lateSep.	128 cm	good
'Eden's Glory'	white, no eye	32 mm	late-June-mid-Sep.	60 cm	good
maculata 'Flower Power'	white, pink blush	25 mm	early-July-mid-Aug.	125 cm	excellent
'Minnie Pearl'	white, no eye	25 mm	early-Jun-mid-Aug.	50 cm	excellent
'Miss Universe'	white, no eye	25 mm	mid-Jul-mid-Sep.	120 cm	good

TABLE 1-continued

CULTIVAR	FLOWER COLOR	FLOWER SIZE	Beginning Flower timing	HEIGHT	MIL-DEW RESIS-TANCE
'Opening Act White'	white, no eye	29 mm	early-June-early Oct	5 0 cm	excellent

The new plant 'Opening Act Blush' differs from these cultivars and all other garden *phlox* known to the inventor in the following repeatedly observed traits in combination:

1. Bright-green, powdery mildew-resistant foliage on compact stems 50 cm tall.
2. Early-season, fragrant, white flowers with excellent flower coverage.
3. Long blooming season of numerous, highly branched stems.
4. Hardy, vigorous, short and compact growth habit.

BRIEF DESCRIPTION OF THE DRAWINGS

The photographs of the new plant demonstrate the unique traits of *Phlox* 'Opening Act White' and the overall appearance of the plant at two-years old. The colors are as accurate as reasonably possible with color reproductions. Variation in ambient light spectrum, source and direction may cause the appearance of minor variation in color.

FIG. **1** shows a close-up of the flowers.

FIG. **2** shows the new plant habit and flowering in an outdoor full-sun display garden in mid-flowering season with clean, disease-free foliage.

DETAILED BOTANICAL DESCRIPTION

The following descriptions and color references are based on the 2001 edition of The Royal Horticultural Society Colour Chart except where common dictionary terms are used. *Phlox paniculata* 'Opening Act White' has not been observed under all possible environments. The phenotype may vary slightly with different growing environments such as temperature, light, fertility, soil pH, moisture and maturity levels, but without any change in the genotype. The following observations and size descriptions are based on two-year old plants in the full sun display garden of a wholesale nursery in Zeeland, Mich. with supplemental fertilizer and water as needed and also a partially shaded greenhouse for color comparison, in particular of the flower.

Parentage: Female or seed parent *Phlox* 'Minnie Pearl' (not patented) and the male or pollen parent *Phlox paniculata* 'Barsixtytwo' U.S. Plant Pat. No. 22,234.

Plant habit: Vigorous; mostly upright, bushy with multiple branched stems; about 11 upright stems per plant.

Plant size.—About 50.0 cm tall; about 40.0 cm across at widest point (about mid flower height).

Propagation: Stem cuttings.

Time to produce rooted shoots: About 3 weeks.

Time to produce flowering plant: About 4 months during winter and spring season from one-year-old plant; about 12 months from liner starting in mid-summer.

Root description: Fibrous, to about 2.0 mm diameter; root color nearest RHS 158A depending on soil type.

Stems: Upright; rounded in cross section; glabrous; size about 50.0 cm long and 4.0 mm in diameter at base.

Stem color.—Variable with position and sun exposure; upper shaded portion between RHS 145A and RHS 145C, upper intense sun nearest RHS 187B; lower portion shaded nearest RHS 146C, lower with high sun exposed areas nearest RHS 187B; stem color at nodes same as surrounding tissue.

Internode: About 9 before flower branches; average internode length about 2.7 cm, usually greater in distal region.

Branches: Glabrous; four to eight per stem without pinching; upper branches about 14.0 to 16.0 cm long and to about 2.0 mm diameter, lower branches about 15.0 to 18.0 cm long and 2.0 mm in diameter; branch color same as stem.

Leaves: Simple, sessile, opposite, oblong elliptic, with acute apex and attenuate base; leaf margin entire; adaxial and abaxial surfaces glabrous; adaxial glossy, abaxial matte; size to about 10.0 cm long and 2.5 cm wide distally smaller, average size about 8.5 cm long and about 2.0 cm wide; number of leaves per flowering stem about 26.

Leaf color.—Adaxial surface nearest RHS 137A; abaxial surface nearest RHS 144A.

Leaf veins.—Pinnate; main vein ridged below and slightly impressed above.

Vein color.—Main adaxial nearest RHS 145C at base and nearest RHS 145A toward apex, secondary veins same color as surrounding tissue; abaxial main vein color nearest RHS 145D toward base and darkening to nearest RHS 145C about half way to apex with apical one tenth of main vein and secondary veins same color as surrounding tissue.

Flower: Shape salverform; direction facing upright and outwardly; overall length about 2.5 cm, with tube about 23 mm long and five flared petals forming a flattened face to about 29 mm diameter, tube about 2.0 mm diameter at base and about 2.5 mm diameter just below corolla; individual flowers remaining effective for about four days; beginning early June and continuing into October.

Flower fragrance.—Sweet.

Petal: Five, complete; smooth and mostly glabrous both adaxial and abaxial; fused together to form a single corolla tube and flattened overlapping blades in face; imbricate to about 4.0 mm of the petals to either side; tube dimensions about 23 mm long about 2.0 mm diameter at base and about 2.5 mm diameter just below corolla; dimension of blade portion about 12.0 mm from tube to apex and about 12.0 mm across in middle; tube glabrous inside except densely pubescent band of about 3.0 mm wide beginning about 3.0 mm from base on inside.

Petal color.—Adaxial face white, lighter than RHS 155D; adaxial eye showing only on inside of tube between RHS 76B and RHS 76A, pubescent band of inner tube lighter than RHS N155 C; 3.0 mm base of tube nearest RHS 145D and from 3.0 mm above base to face between RHS 76B and RHS 76A with five white stripes lighter than RHS 155D extending the full length directly below each anther; abaxial face white, lighter than RHS 155D; adaxial tube nearest RHS 77B; abaxial tube between RHS 76B and RHS 76A, base of tube lighter than RHS 145D.

Sepals: Glabrous abaxial and adaxial; normally five; about 10.0 mm long and individually about 1.5 mm wide before being fused in basal 6.5 mm; sharply acute apex and fused base.

Sepal color.—Variable with strong light exposure; abaxial color nearest RHS 138C at base and nearest RHS 138A at apex with transparent fusion joints; adaxial nearest RHS 144A at apex and lightening to nearest RHS 144B at base; with intense light expo-

sure developing strong tinting on all but adaxial and abaxial base and fusion joints to between RHS N77B and RHS 77A.

Stamens: Five; adnate to inner petal tube, positioned at two heights above base, about 16.0 mm and 18.0 mm.

Filament: Fused to inside of corolla tube; less than about 0.5 mm long or less than 0.5 mm diameter; color white, lighter than RHS 155D.

Anther: Oblong; dorsifixed; about 2.0 mm long and 0.5 mm diameter; color nearest RHS 11C.

Pollen: Abundant, globose; color between RHS 17A and RHS 17B.

Style: About 18 mm long and less than 0.5 mm diameter; color nearest RHS 157B lightening to nearest RHS 145D at base.

Stigma: Split in three in the terminal 2.5 mm; color nearest RHS 145D.

Ovary: Ovoid; superior; about 1.5 mm long and 1.0 mm wide tapering to diameter of style in distal portion; apex acute tapering to style; color nearest RHS 145A.

Peduncle: Stiff, strong, cylindrical, glabrous; main flowering portion about 2.5 cm long and about 1.5 mm diameter at base of flowers.

Peduncle color.—Upper portion in more shaded region vary between RHS 145A and RHS 145C; lower portion and more sun exposed areas between RHS 187C and RHS 184B.

Pedicel: Glaucous, glabrous, stiff, strong, erect, rounded to about 0.5 cm diameter and to 4.0 mm long.

Pedicel color.—Nearest RHS 144B with tinting of nearest RHS 187A in tissue exposed to strong light intensity.

Bracts below flower clusters: Simple, sessile, opposite, oblong elliptic, with acute apex and attenuate base; leaf margin entire; adaxial and abaxial surfaces glabrous; adaxial glossy, abaxial matte; about 22.0 mm long and about 5.0 mm wide.

Bract color.—Adaxial between RHS 143A and RHS 141B with tinting of RHS 77A; abaxial nearest RHS 144A with tinting of RHS 77A; bract vein color adaxial nearest RHS 151A and abaxial nearest 145C.

Fruit: Rare, one to two seeds per longitudinally dehiscent capsule; ovoid; about 5.0 cm long and 3.5 mm diameter; mucronate with apical mucro about 1.5 mm long and 0.5 mm diameter; color at dehiscence nearest RHS 161D.

Seeds: Rare, flattened ellipsoid, about 2.0 mm long, 1.6 mm across and 1.2 mm thick; color mostly between RHS 202A and RHS 200A.

Disease resistance: In side-by-side comparisons *Phlox* 'Opening Act Blush' shows high resistance to powdery mildew throughout the season, a disease common to many garden *phlox*. Resistance was equal or better than both of the parents. Other disease or pest resistance beyond that which is common to perennial, hardy, garden *phlox* has not been noted.

Hardiness and culture: *Phlox* 'Opening Act White' grows best with plenty of moisture and adequate drainage; hardy to at least from USDA zone 4 through 8. *Phlox* 'Opening Act White' adds long season beauty and fragrance to the garden and attracts butterflies and hummingbirds.

I claim:

1. A new and distinct plant of hybrid garden *phlox, Phlox* 'Opening Act White', as herein described and illustrated.

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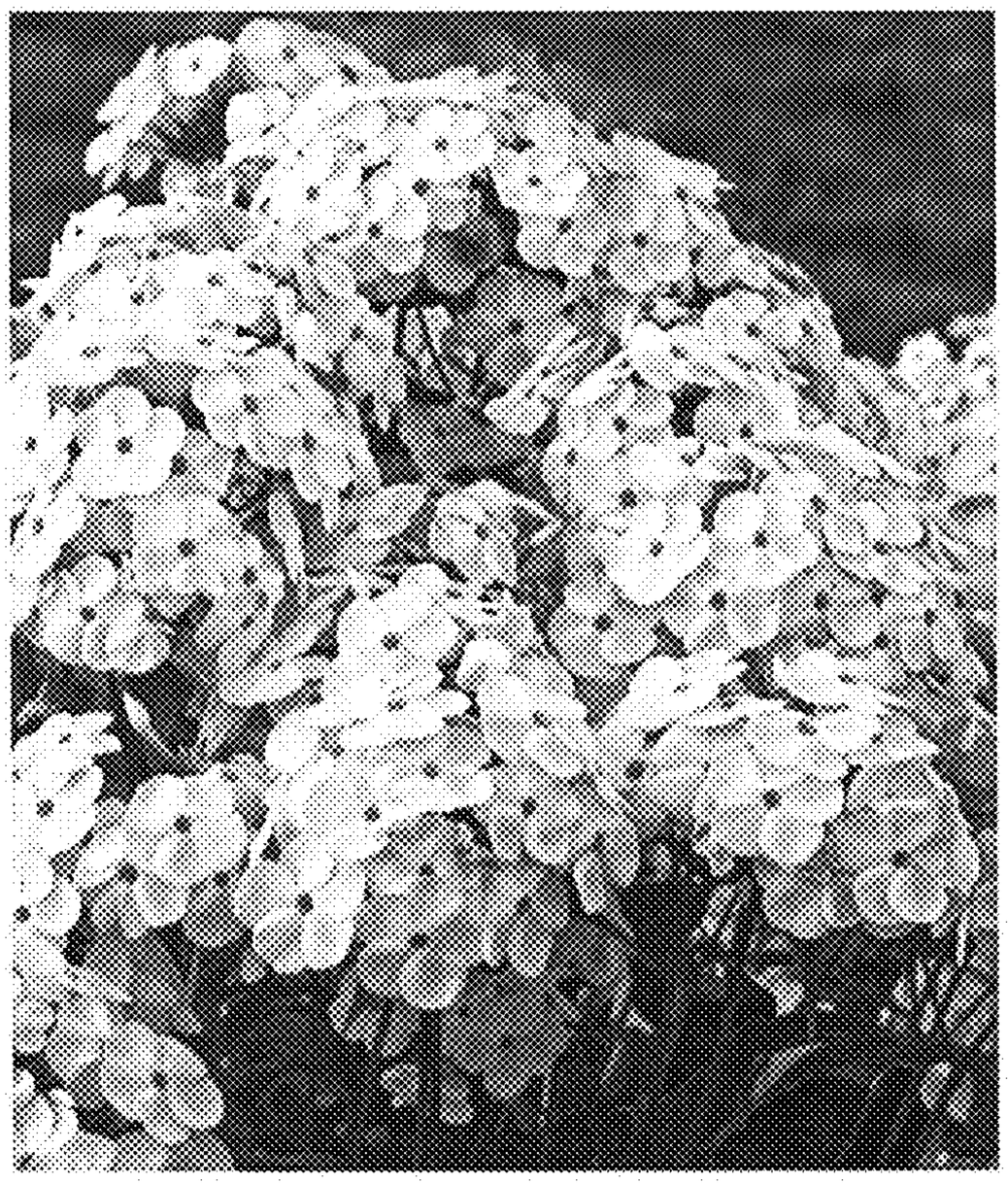

FIG. 1

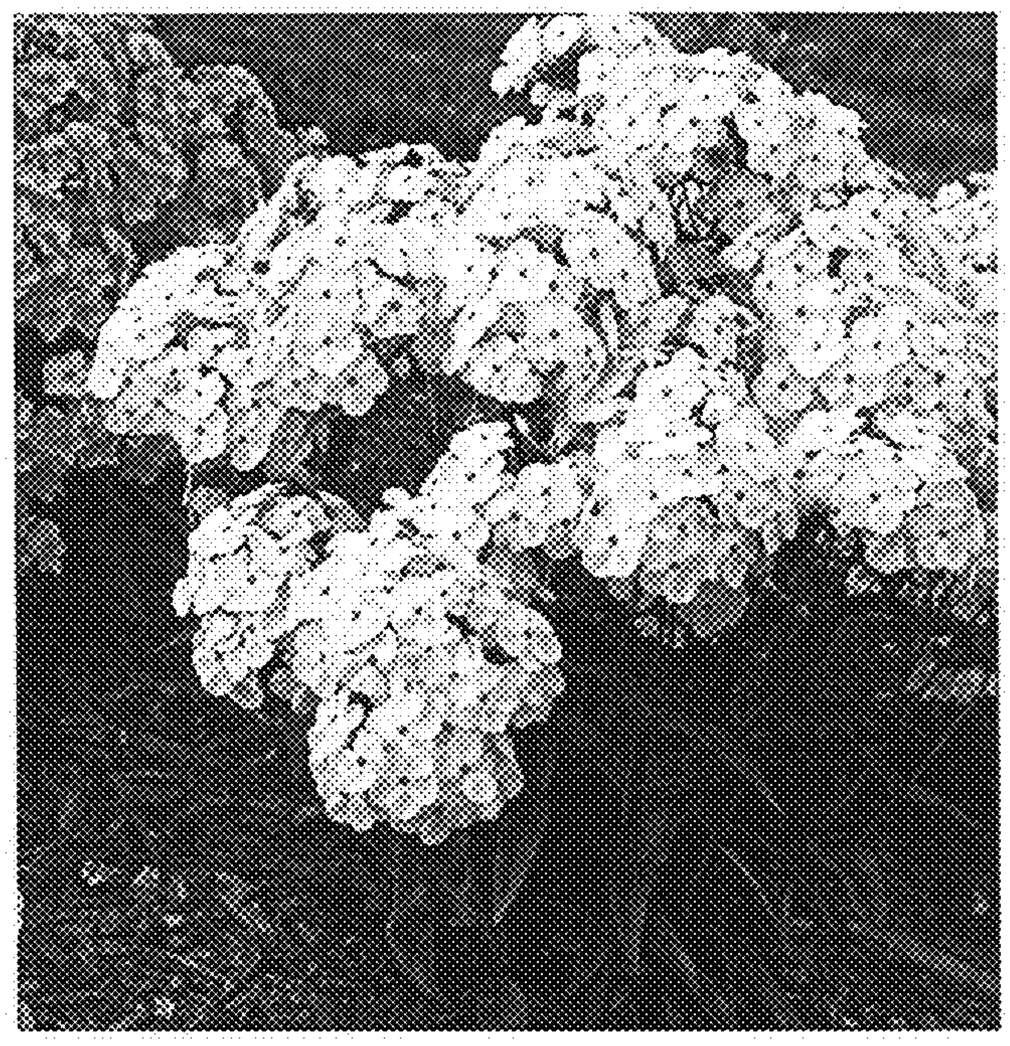

FIG. 2