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(12) **United States Plant Patent**
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- (54) **PHLOX PLANT NAMED 'USPLX50302'**
- (50) Latin Name: *Phlox hybrida*
Varietal Denomination: **USPLX50302**
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- (73) Assignee: **Plant 21 LLC**, Bonsall, CA (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
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- (52) **U.S. Cl.** **Plt./320**
- (58) **Field of Classification Search** Plt./320
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Phlox* plant named 'USPLX50302', characterized by its upright, outwardly spreading and mounding plant form; vigorous growth habit; freely branching habit and short internodes; dense and busy plant habit; freely and continuous flowering habit; white-colored flowers; relatively tolerant to high temperatures; and relatively resistant to Powdery Mildew.

1 Drawing Sheet**1**

Botanical designation: *Phlox hybrida*.
Cultivar denomination: 'USPLX50302'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Phlox* plant, botanically known as *Phlox hybrida* and hereinafter referred to by the name 'USPLX50302'.

The new *Phlox* plant is a product of a planned breeding program conducted by the Inventor in Higashiom, Shiga, Japan and Bonsall, Calif. The objective of the breeding program is to create new uniformly mounding *Phlox* plants with unique flower color and resistance to Powdery Mildew.

The new *Phlox* plant originated from a cross-pollination made by the Inventor on Jun. 12, 2005 in Higashiom, Shiga, Japan of an unnamed selection of *Phlox glabriiflora*, not patented, as the female, or seed, parent with an unnamed seedling selection of *Phlox hybrida*, not patented, as the male, or pollen, parent. The new *Phlox* plant was discovered and selected by the Inventor as a single flowering plant within the progeny of the stated cross-pollination in a controlled environment in Bonsall, Calif. on Jul. 6, 2006.

Asexual reproduction of the new *Phlox* plant by cuttings in a controlled environment in Bonsall, Calif. since Jul. 10, 2006, has shown that the unique features of this new *Phlox* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Phlox* plant have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment and cultural practices such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'USPLX50302'. These characteristics in combination distinguish 'USPLX50302' as a new and distinct cultivar of *Phlox*:

1. Upright, outwardly spreading and mounding plant form.
2. Vigorous growth habit.

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3. Freely branching habit and short internodes; dense and busy plant habit.

4. Freely and continuous flowering habit.

5. White-colored flowers.

6. Relatively tolerant to high temperatures.

7. Relatively resistant to Powdery Mildew.

Plants of the new *Phlox* can be compared to plants of the parent selections. Plants of the new *Phlox* differ from plants of the female parent selection in the following characteristics:

1. Plants of the new *Phlox* are more freely branching than plants of the female parent selection.

2. Plants of the new *Phlox* are more mounding than and not as creeping as plants of the female parent selection.

Plants of the new *Phlox* differ primarily from plants of the male parent selection in plant vigor as plants of the new *Phlox* are more vigorous than plants of the male parent selection.

Plants of the new *Phlox* can be compared to plants of the *Phlox* 'USPHLOTM6', disclosed in U.S. Plant Pat. No. 17,797. In side-by-side comparisons, plants of the new *Phlox* and 'USPHLOTM6' differed in the following characteristics:

1. Plants of the new *Phlox* were more compact than plants of 'USPHLOTM6'.

2. Plants of the new *Phlox* were more freely branching than plants of 'USPHLOTM6'.

3. Flower petals of plants of the new *Phlox* were more serrated and pointed than flower petals of plants of 'USPHLOTM6'.

Plants of the new *Phlox* can also be compared to plants of the *Phlox* 'Snow Crisp', not patented. In side-by-side comparisons, plants of the new *Phlox* and 'Snow Crisp' differed in the following characteristics:

1. Plants of the new *Phlox* were more vigorous than plants of 'Snow Crisp'.

2. Flower petals of plants of the new *Phlox* were more serrated and pointed than flower petals of plants of 'Snow Crisp'.

3. Plants of the new *Phlox* were more resistant to Powdery Mildew than plants of 'Snow Crisp'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Phlox* plant, showing the colors as true as it is reasonably possible to obtain in 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 colors of the new *Phlox* plant. 10

The photograph at the bottom of the sheet comprises a side perspective view of a typical flowering plant of 'USPLX50302' grown in a container. 15

The photograph at the top of the sheet is a close-up view of typical flowers and leaves of 'USPLX50302'. 15

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown in Bonsall, Calif., under commercial practice in one-gallon containers during the autumn in an outdoor nursery with day temperatures ranging from 18° C. to 38° C., night temperatures ranging from 9° C. to 18° C. and light levels ranging from 7,000 to 10,000 foot-candles. Plants were pinched one time and were ten weeks old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used. 30

Botanical classification: *Phlox hybrida* 'USPLX50302'.

Parentage:

Female, or seed, parent.—Unnamed selection of *Phlox glabriflora*, not patented. 35

Male, or pollen, parent.—Unnamed seedling selection of *Phlox hybrida*, not patented.

Propagation:

Type.—By cuttings.

Time to initiate roots, summer.—About six days at temperatures ranging from 17° C. to 29° C. 40

Time to initiate roots, winter.—About four days at temperatures ranging from 17° C. to 21° C.

Time to produce a rooted plant, summer.—About 28 days at temperatures ranging from 17° C. to 29° C. 45

Time to produce a rooted plant, winter.—About 25 days at temperatures ranging from 17° C. to 21° C.

Root description.—Thin to medium in thickness; white in color.

Rooting habit.—Moderate branching; sparse to medium in density. 50

Plant description:

Plant form/habit.—Upright, outwardly spreading and mounding plant form; vigorous growth habit; freely branching habit, about seven main laterals each with numerous secondary laterals; relatively short internodes; dense and bushy plant habit. 55

Plant height.—About 20 cm.

Plant width (spread).—About 46 cm.

Lateral branches.—Length: About 29 cm. Diameter: 60 About 2 mm. Internode length: About 1.2 cm. Strength: Strong. Texture: Pubescent. Color: Close to 146B.

Foliage description:

Arrangement.—Alternate, simple; sessile. 65

Length.—About 3 cm.

Width.—About 7 mm.

Shape.—Oblong.

Apex.—Acute.

Base.—Rounded to slightly auriculate; clasping.

Margin.—Entire.

Texture, upper and lower surfaces.—Pubescent.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 146A. Developing leaves, lower surface: Close to 146B. Fully expanded leaves, upper surface: Close to 146A; venation, close to 146B. Fully expanded leaves, lower surface: Close to 147B; venation, close to 146C.

Flower description:

Flower type/habit.—Single rotate and salverform flowers arranged in small cymes of four flowers each; flowers face upright to outwardly; freely flowering habit with about 120 flower buds and flowers developing per plant.

Fragrance.—None detected.

Natural flowering season.—Continuously flowering from spring to frost in California.

Postproduction longevity.—Flowers last about five days on the plant; flowers persistent.

Flower buds.—Height: About 1.4 cm. Diameter: About 2.5 mm. Shape: Narrowly elongate. Color: Close to 157A.

Inflorescence height.—About 2.5 cm.

Inflorescence diameter.—About 3.5 cm to 4 cm.

Flower diameter.—About 2.3 cm.

Flower depth.—About 1.8 cm.

Flower throat diameter.—About 1.5 mm.

Flower tube length.—About 1.4 cm.

Flower tube diameter, at base.—About 2 mm.

Petals.—Quantity per flower: Typically five in a single whorl; petals fused at the base into a narrow tube. Lobe length: About 1.2 cm. Lobe width: About 1.1 cm. Shape: Obovate. Apex: Rounded with a shallow point. Margin: Entire. Texture: Petal lobes, upper surface: Smooth, glabrous; velvety. Petal lobes, lower surface: Smooth, glabrous; satiny. Throat: Smooth, glabrous. Tube: Pubescent. Color: Developing and fully expanded petals, upper surface: Close to NN155A; venation, close to NN155A. Developing and fully expanded petals, lower surface: Close to NN155C; venation, close to NN155C. Flower throat: Close to 157A; venation, close to 157A. Flower tube: Close to 157A; venation, close to 157A.

Sepals.—Quantity per flower: Typically five in a single whorl, fused towards the base into a slender tube and reflexed towards the apex. Length: About 1 cm. Width: About 1 mm. Shape: Lanceolate. Apex: Acuminate. Margin: Entire. Texture, upper and lower surfaces: Pubescent. Color, upper surface: Close to 146A. Color, lower surface: Close to 146B.

Peduncles.—Length: About 1 cm. Diameter: About 1 mm. Angle: Erect to about 45° from vertical. Strength: Strong. Texture: Pubescent. Color: Close to 144B.

Pedicels.—Length: About 6 mm. Diameter: About 1 mm. Angle: Erect to about 30° from peduncle axis. Strength: Strong. Texture: Pubescent. Color: Close to 144B.

Reproductive organs.—Stamens: Quantity per flower: Typically five. Filament length: About 1 mm. Fila-

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ment color: Close to 157A. Anther shape: Narrowly oblong. Anther length: About 2 mm. Anther color: Close to 12A. Pollen amount: Scarce. Pollen color: Close to 14A. Pistils: Quantity per flower: One. Pistil length: About 5 mm. Stigma shape: Tri-parted. Stigma color: Close to 157A. Style length: About 1.5 mm. Style color: Close to 145D. Ovary color: Close to 144B.

Seed/fruit.—Seed and fruit development have not been observed.

Disease/pest resistance: Plants of the new *Phlox* have been noted to be relatively resistant to Powdery Mildew. Plants

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of the new *Phlox* have not been noted to be resistant to pests and other pathogens common to *Phlox*.

Garden performance: Plants of the new *Phlox* have been observed to have good garden performance and tolerate rain, wind and temperatures ranging from about 1° C. to about 40° C.; relatively tolerant to high temperatures.

It is claimed:

1. A new and distinct *Phlox* plant named 'USPLX50302' as 10 illustrated and described.

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