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(12) **United States Plant Patent**
Verduin(10) **Patent No.:** US PP19,106 P2
(45) **Date of Patent:** Aug. 19, 2008(54) **ASTILBE PLANT NAMED 'TO HAVE AND TO HOLD'**(50) Latin Name: *Astilbe chinensis*
Varietal Denomination: To Have and To Hold(75) Inventor: **Henricus Gijsbertus Johannes Verduin**, Heemskerk (NL)(73) Assignee: **Witteman & Co.**, Hillegom (NL)

(*) 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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A01H 5/00 (2006.01)(52) **U.S. Cl.** **Plt./407; Plt./263**(58) **Field of Classification Search** **Plt./407, Plt./263**

See application file for complete search history.

Primary Examiner—Kent L. Bell*Assistant Examiner*—S. B. McCormick-Ewoldt(74) *Attorney, Agent, or Firm*—C. A. Whealy(57) **ABSTRACT**

A new and distinct cultivar of *Astilbe* plant named 'To Have and To Hold', characterized by its upright and sturdy plant habit; strong and healthy foliage; freely and uniformly flowering habit; intense red purple-colored flowers; and good garden performance.

3 Drawing Sheets**1**

Botanical designation: *Astilbe chinensis*.
Cultivar denomination: 'To Have and To Hold'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Astilbe*, botanically known as *Astilbe chinensis* and hereinafter referred to by the name 'To Have and To Hold'.

The new *Astilbe* is a product of a planned breeding program conducted by the Inventor in Heemskerk, The Netherlands. The objective of the breeding program was to create new *Astilbe* cultivars with healthy foliage and attractive flower coloration.

The new *Astilbe* originated from a cross-pollination made by the Inventor in 1998 in Heemskerk, The Netherlands, of two unidentified selections of *Astilbe chinensis*, not patented. The new *Astilbe* 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 Heemskerk, The Netherlands in July, 1999.

Asexual reproduction of the new *Astilbe* by divisions in a controlled environment in Heemskerk, The Netherlands since January, 2000, has shown that the unique features of this new *Astilbe* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The cultivar To Have and To Hold has 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 'To Have and To Hold'. These characteristics in combination distinguish 'To Have and To Hold' as a new and distinct cultivar of *Astilbe*:

1. Upright and sturdy plant habit.
2. Strong and healthy foliage.

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3. Freely and uniformly flowering habit.
4. Intense red purple-colored flowers.
5. Good garden performance.

Plants of the new *Astilbe* and the parent selections differ primarily in flower coloration and plant height.

Plants of the new *Astilbe* can be compared to plants of the cultivar Vision in Red, disclosed in U.S. Plant Pat. No. 11,965. In side-by-side comparisons conducted in Heemskerk, The Netherlands, plants of the new *Astilbe* and the cultivar Vision in Red differed in the following characteristics:

1. Plants of the new *Astilbe* were taller than plants of the cultivar Vision in Red.
2. Plants of the new *Astilbe* had red purple-colored flowers whereas plants of the cultivar Vision in Red had purple-colored flowers.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Astilbe*, 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 *Astilbe*.

The photograph on the first sheet comprises a side perspective view of a typical flowering plant of 'To Have and To Hold' grown in a container.

The photograph on the second sheet is a close-up view of a typical inflorescence of 'To Have and To Hold'.

The photograph at the top of the third sheet is a close-up view of typical flowers of 'To Have and To Hold'.

The photograph at the bottom of the third sheet is a close-up view of the upper surface of a typical leaf of 'To Have and To Hold'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown in containers in Heemskerk, The Netherlands, under commercial practice during the early autumn in an outdoor nursery with day temperatures ranging from 12° C. to 32° C. and night temperatures ranging from 12° C. to 16° C. Plants had been growing for about one year when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2001 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Astilbe chinensis* cultivar To Have and To Hold.

Parentage:

Female, or seed, parent.—Unidentified selection of *Astilbe chinensis*, not patented.

Male, or pollen, parent.—Unidentified selection of *Astilbe chinensis*, not patented.

Propagation:

Type.—By divisions.

Time to initiate roots.—About 20 days at 15° C.

Time to produce a rooted plant.—About 50 days at 20° C.

Root description.—Fine; white in color.

Rooting habit.—Freely branching.

Plant description:

Plant form/habit.—Herbaceous perennial. Upright and sturdy plant habit; roughly triangular. Flowering stems and leaves basal; dense and bushy growth habit; moderately vigorous to vigorous growth habit. Freely and uniformly flowering with numerous flowers on branched panicles.

Growth rate.—Moderate to fast; from divisions, about 16 weeks are required to produce fully-grown flowering plants.

Plant height (soil level to top of foliar plane).—About 38.1 cm.

Plant height (soil level to top of inflorescences).—About 78.8 cm.

Plant width (spread).—About 60 cm.

Stem description.—Length: About 43.2 cm. Diameter: About 4 mm. Internode length: About 15.3 cm. Strength: Strong. Texture: Sparsely pubescent. Color: 144A; towards the base, 144C.

Foliage description:

Arrangement.—Alternate; biternately compound.

Leaf length (excluding petiole).—About 26.8 cm.

Leaf width.—About 26.7 cm.

Lateral leaflet length.—About 5.1 cm.

Lateral leaflet width.—About 3.5 cm.

Terminal leaflet length.—About 5.2 cm.

Terminal leaflet width.—About 4.8 cm.

Lateral and terminal leaflet shape.—Ovate.

Lateral and terminal leaflet apex.—Acute.

Lateral and terminal leaflet base.—Attenuate.

Lateral and terminal leaflet margin.—Biserrate.

Lateral and terminal leaflet texture, upper and lower surfaces.—Sparsely pubescent; slightly rough.

Lateral and terminal leaflet venation pattern.—Pinnate.

Lateral and terminal leaflet color.—Developing leaves, upper surface: 143A. Developing leaves, lower surface: 138B. Fully expanded leaves, upper surface: Between 137A and 139A; venation, 138C. Fully

expanded leaves, lower surface: 137B; venation, 148A.

Leaf petiole length.—About 12.1 cm.

Leaf petiole diameter.—About 2.5 mm.

Leaflet petiole length.—About 4.9 cm.

Leaflet petiole width.—About 2.5 mm.

Leaf and leaflet petiole texture, upper and lower surfaces.—Smooth, glabrous.

Leaf and leaflet petiole color, upper and lower surfaces.—144B; at the nodes, 176A.

Flower description:

Flower type/habit.—Numerous single rotate flowers arranged on branched panicles; flowers face upright, outward or downward depending on position on the panicle. Panicles conical in shape. Freely and uniformly flowering habit with about 1,000 flower buds and flowers developing per inflorescence; typically nine panicles develop per plant.

Fragrance.—Faintly fragrant; sweet.

Natural flowering season.—Continuously flowering during the summer and late summer in Heemskerk, The Netherlands.

Postproduction longevity.—Flowers last about ten days on the plant. Flowers persistent.

Flower buds.—Height: About 4 mm. Diameter: About 2 mm. Shape: Ovoid. Color: 71A; towards the base, 146C to 146D.

Inflorescence height.—About 27 cm.

Inflorescence diameter.—About 14.8 cm.

Flower diameter.—About 1.3 cm.

Flower depth.—About 9 mm.

Petals.—Quantity per flower: Typically five in a single whorl. Length: About 8 mm. Lobe width: About 0.75 mm. Shape: Narrowly oblanceolate. Apex: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: Developing petals, upper and lower surfaces: N66B to N66C. Fully expanded petals, upper and lower surfaces: N66B; color becoming closer to N80D with development.

Sepals.—Quantity per flower: Typically five in a single whorl, fused towards to the base; campanulate calyx. Length: About 2 mm. Width: About 1 mm. Shape: Ovate. Apex: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, developing sepals, upper and lower surfaces: 146C to 146D. Color, fully expanded sepals, upper and lower surfaces: 60B to 60C; towards the base, 62C to 62D.

Peduncles.—Length: About 26.1 cm. Diameter: About 2.5 mm. Angle: Erect. Strength: Strong. Texture: Smooth, glabrous. Color: 184A to 184B.

Pedicels.—Length: About 1 mm. Diameter: About 0.5 mm. Angle: About 45° from vertical. Strength: Moderately strong. Texture: Smooth, glabrous. Color: 62C to 62D.

Reproductive organs.—Stamens: Quantity per flower: Typically eleven; anthers basifix. Filament length: About 4 mm. Anther shape: Oblong. Anther length: About 0.8 mm. Anther color: 156D. Pollen amount: Moderate. Pollen color: 155D. Pistils: Quantity per flower: Three. Pistil length: About 2.5 mm. Stigma shape: Club-shaped. Stigma color: 60B to 60C. Style length: About 2.3 mm. Style color: 60C to 60D. Ovary color: 60D.

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

Disease/pest resistance: Plants of the new *Astilbe* have not been noted to be resistant to pathogens and pests common to *Astilbe*.

Garden performance: Plants of the new *Astilbe* have been observed to have good garden performance and tolerate rain, wind and high temperatures of about 35° C. Plants of the new *Astilbe* have been observed to be hardy to USDA Zone 5.

It is claimed:

1. A new and distinct *Astilbe* plant named 'To Have and To Hold' as illustrated and described.

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