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van Dijk

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(54) **HYDRANGEA PLANT NAMED ‘HI SKY’**

(50) Latin Name: *Hydrangea macrophylla*
Varietal Denomination: **HI SKY**

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(*) 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.**
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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Hydrangea* plant named ‘HI SKY’, characterized by its upright and broadly spreading plant habit; freely branching habit; strong and sturdy stems; freely flowering habit; large and dense inflorescences with purplish pink-colored sterile flowers; and good post-production longevity.

2 Drawing Sheets

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Botanical designation: *Hydrangea macrophylla*.
Cultivar denomination: ‘HI SKY’.

STATEMENT REGARDING PRIOR
DISCLOSURES BY INVENTOR/APPLICANT &
ASSIGNEE

The Inventor/Applicant and Assignee assert that no publications nor advertisements relating to sales, offers for sale or public distribution occurred more than one year prior to the effective filing date of this application. Any information about the claimed plant would have been obtained from a direct or indirect disclosure from the Inventor/Applicant and/or the Assignee. Inventor/Applicant and Assignee claim a prior art exception under 35 U.S.C. 102(b)(1) for disclosure and/or sales prior to the filing date but less than one year prior to the effective filing date.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Hydrangea* plant, botanically known as *Hydrangea macrophylla*, commercially referred to as a mophead-type *Hydrangea* and hereinafter referred to by the name ‘HI SKY’.

The new *Hydrangea* plant is a product of a planned breeding program conducted by the Inventor in De Lier, The Netherlands. The objective of the breeding program is to create new sturdy and strong *Hydrangea* plants with attractive inflorescences and good postproduction longevity.

The new *Hydrangea* plant originated from a cross-pollination on Apr. 15, 2015 of a proprietary selection of *Hydrangea macrophylla* identified as code number 1219, not patented, as the female, or seed, parent with a proprietary selection of *Hydrangea macrophylla* identified as code number 1453, not patented, as the male, or pollen, parent. The new *Hydrangea* plant was discovered and selected as a single flowering plant from within the progeny of the stated

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cross-pollination in a controlled greenhouse environment in De Lier, The Netherlands on Apr. 4, 2017.

Asexual reproduction of the new *Hydrangea* plant by terminal vegetative cuttings since Jun. 11, 2017 in a controlled greenhouse environment in De Lier, The Netherlands has shown that the unique features of this new *Hydrangea* plant are stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

Plants of the new *Hydrangea* have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions 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 ‘HI SKY’. These characteristics in combination distinguish ‘HI SKY’ as a new and distinct *Hydrangea* plant:

1. Upright and broadly spreading plant habit.
2. Freely branching habit.
3. Strong and sturdy stems.
4. Freely flowering habit.
5. Large and dense inflorescences with purplish pink-colored sterile flowers.
6. Good post-production longevity.

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

1. Plants of the new *Hydrangea* are more vigorous than plants of the female parent selection.
2. Stems of plants of the new *Hydrangea* are sturdier than stems of plants of the female parent selection.

Plants of the new *Hydrangea* can be compared to plants of the male parent selection. Plants of the new *Hydrangea* differ primarily from plants of the male parent selection in

stem strength as stems of plants of the new *Hydrangea* are sturdier than stems of plants of the male parent selection. In addition, sterile flowers of plants of the new *Hydrangea* have better substance than sterile flowers of plants of the male parent selection.

Plants of the new *Hydrangea* can also be compared to plants of *Hydrangea macrophylla* 'HBA 202911', not patented. In side-by-side comparisons, plants of the new *Hydrangea* differ primarily from plants of 'HBA 202911' in the following characteristics:

1. Plants of the new *Hydrangea* are more vigorous than plants of 'HBA 202911'.
2. Stems of plants of the new *Hydrangea* are sturdier than stems of plants of 'HBA 202911'.
3. Sterile flowers of plants of the new *Hydrangea* have better substance than sterile flowers of plants of 'HBA 202911'.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the unique appearance of the new *Hydrangea* 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 from the color values cited in the detailed botanical description which accurately describe the colors of the new *Hydrangea* plant.

The photograph on the first sheet (FIG. 1) is a side perspective view of a typical flowering plant of 'HI SKY' grown in a container.

The photograph at the top of the second sheet (FIG. 2) is a close-up view of a typical inflorescence of 'HI SKY'.

The photograph at the bottom of the second sheet (FIG. 3) is a close-up view of a typical leaf of 'HI SKY'.

DETAILED BOTANICAL DESCRIPTION

Plants used in the aforementioned photographs and in the following description were grown during the spring in 14-cm containers in a glass-covered greenhouse in De Lier, The Netherlands and under cultural practices typical of commercial *Hydrangea* production. During the production of the plants, day temperatures ranged from 20° C. to 35° C., night temperatures ranged from 10° C. to 22° C. and light levels averaged 4,000 lux. Plants of the new *Hydrangea* were pinched one time and were 18 months old when the photographs and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2015 Edition, except where general terms of ordinary dictionary significance are used. Plants have not been evaluated when treated with aluminum sulfate (or "blued").

Botanical description: *Hydrangea macrophylla* 'HI SKY'.

Parentage:

Female, or seed, patent.—Proprietary selection of *Hydrangea macrophylla* identified as code number 1219, not patented.

Male, or pollen, patent.—Proprietary selection of *Hydrangea macrophylla* identified as code number 1453, not patented.

Propagation:

Type cutting.—By vegetative terminal cuttings.

Time to initiate roots, summer.—About twelve days at temperatures about 22° C.

Time to initiate roots, winter.—About two weeks at temperatures about 20° C.

Time to produce a rooted young plant, summer.—

About four weeks at temperatures about 22° C.

Time to produce a rooted young plant, winter.—About one month at temperatures about 19° C.

Root description.—Medium in thickness, fibrous; typically white in color, actual color of the roots is dependent on substrate composition, water quality, fertilizer type and formulation, substrate temperature and physiological age of roots.

Rooting habit.—Moderately freely branching; medium density.

Plant description:

Plant and growth habit.—Upright, broadly outwardly spreading and mounding plant habit; flattened globular to broadly obovate in overall shape; strong and sturdy stems; moderately vigorous growth habit and moderate growth rate; about six months from propagation are required to produce small finished flowering plants.

Plant height.—About 37.5 cm.

Plant diameter or area of spread.—About 48.5 cm.

Lateral branch description:

Branching habit.—Freely branching habit with about eleven lateral branches per plant; pinching enhances lateral branch development.

Length.—About 16.3 cm.

Diameter.—About 7 mm.

Internode length.—About 4.1 cm.

Strength.—Strong, sturdy.

Aspect.—About 30° from vertical.

Texture.—Smooth, glabrous; fully developed, woody.

Color, developing.—Close to 143A; at the nodes, tinged with close to 200A to 200B.

Color, fully developed.—Close to 144A; at the nodes, slightly tinged with close to 183B; when woody, close to 199A, N199A and 200B.

Lenticels.—Density: Medium. Length: About 1.75 mm. Width: About 0.5 mm. Color: Close to 200A and 200B.

Leaf description:

Arrangement.—Opposite, simple.

Length.—About 11.1 cm.

Width.—About 8.2 cm.

Shape.—Broadly ovate to broadly elliptic and broadly oblong.

Apex.—Apiculate.

Base.—Short attenuate to close to obtuse.

Margin.—Coarsely crenate to serrate.

Texture, upper surface.—Slightly rugose, glabrous.

Texture, lower surface.—Moderately rugose, glabrous.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 137B. Developing leaves, lower surface: Close to 144A. Fully developed leaves, upper surface: Darker than a blend of 147A and N189A; venation, close to 144C. Fully developed leaves, lower surface: Close to 147B; venation, close to 146D.

Petioles.—Length: About 2.2 cm. Diameter: About 3.5 mm to 4 mm. Texture and luster, upper and lower surfaces: Smooth, glabrous; slightly glossy. Color, upper surface: Close to 145A; at the edges, close to 143A. Color, lower surface: Close to 144B.

Flower description:

Flower type and habit.—Showy rotate sterile flowers and small, inconspicuous rotate fertile flowers

arranged on mophead-type terminal panicles; panicles flattened globular in shape; sterile flowers face upright to outwardly and fertile flowers mostly upright.

Fragrance.—None detected.

Natural flowering season.—In the garden, plants flower continuously from the late spring to late summer in The Netherlands; flower dormancy can be broken by giving a cold treatment.

Flower longevity.—Good postproduction longevity; sterile flowers maintain good substance for about six weeks on the plant, sterile flowers persistent; fertile flowers last for a few days on the plant, fertile flowers not persistent.

Quantity of flowers.—Freely flowering habit; about 160 sterile flowers per panicle and about 30 fertile flowers per panicle.

Panicle height.—About 8.9 cm.

Panicle diameter.—About 15.7 cm.

Panicle peduncles.—Length: About 4.8 cm. Diameter: About 3.75 mm. Strength: Strong. Aspect: Primary peduncles, mostly erect; lateral peduncles, about 45° from primary peduncle axis. Texture: Moderately pubescent. Color: Close to 175A strongly tinged with close to 146D.

Sterile flower buds.—Length: About 9 mm. Diameter: About 1.3 cm. Shape: Irregular and broadly cup-shaped. Color: Close to 58D; proximally, close to 145C.

Fertile flower buds.—Length: About 5 mm. Diameter: About 4 mm. Shape: Broadly obovate. Color: Close to 75D.

Sterile flower diameter.—About 2.3 cm to 3.3 cm.

Sterile flower depth (height).—About 0.9 cm to 1.3 cm.

Fertile flower diameter.—About 7 mm.

Fertile flower depth (height).—About 5 mm.

Petals, sterile flowers.—Quantity and arrangement: Four in a single whorl. Length: About 3.5 mm. Width: About 2.25 mm. Shape: Ovate, moderately concave. Apex: Acute. Base: Cuneate. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: When opening and fully opened, upper surface: Close to 76B; color does not change with subsequent development. When opening and fully opened, lower surface: Close to 76B to 76C; color does not change with subsequent development.

Petals, fertile flowers.—Quantity and arrangement: Five in a single whorl. Length: About 4 mm. Width: About 2.25 mm. Shape: Ovate, concave. Apex: Acute. Base: Cuneate. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: When opening and fully opened, upper surface: Close to 76C; color does not change with subsequent development. When opening and fully opened, lower surface: Close to 76C; color does not change with subsequent development.

Sepals, sterile flowers.—Quantity and arrangement: Typically four, or occasionally three or five, in a single whorl; imbricate. Length: About 1.3 cm to 2 cm. Width: About 1.1 cm to 2.2 cm. Shape: Reniform to broadly rhomboidal, slightly concave. Apex: Broadly and bluntly acute to obtuse. Base: Broadly

cuneate to truncate. Margin: Shallowly crenate to dentate; slightly and coarsely undulate. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: When opening, upper surface: Close to 67D. When opening, lower surface: Close to 73B and 73C. Fully opened, upper surface: Close to 68A; towards the margins and apex, close to 68B; color does not change with subsequent development. Fully opened, lower surface: Close to 75B; color does not change with subsequent development.

Sepals, fertile flowers.—Quantity and arrangement: Five in a single whorl. Length: About 1.5 mm. Width: About 1.5 mm. Shape: Broadly ovate to roughly deltoid. Apex: Acute. Base: Cuneate. Margin: Entire. Texture and luster, upper and lower surfaces: Smooth, glabrous; matte. Color: When opening, upper and lower surfaces: Close to 150D. Fully opened, upper and lower surfaces: Close to 150D; color does not change with subsequent development.

Pedicels, sterile flowers.—Length: About 2.4 cm. Diameter: About 1.5 mm. Strength: Moderately strong. Aspect: About 25° from main peduncle axis. Texture and luster: Densely pubescent; slightly glossy. Color: Close to 75A to 75B.

Pedicels, fertile flowers.—Length: About 3 mm. Diameter: About 1 mm. Strength: Moderately strong. Aspect: About 15° from vertical. Texture and luster: Sparsely pubescent; matte. Color: Close to 68C.

Reproductive organs, sterile flowers.—Stamens: Quantity per flower: Eight. Filament length: About 3 mm. Filament color: Close to 69D to lighter than 69D. Anther shape: Broadly oblong. Anther length: About 0.5 mm. Anther color: Close to N77D. Pollen amount: Moderate. Pollen color: Close to 156D. Pistils: Pistil quantity per flower: Two, or occasionally, one or three. Pistil length: About 1.5 mm. Stigma shape: Club-shaped. Stigma color: Close to 69D. Style length: About 1 mm. Style color: Close to 69C. Ovary color: Close to 150D.

Reproductive organs, fertile flowers.—Stamens: Quantity per flower: Ten. Filament length: About 3 mm. Filament color: Close to 69D to lighter than 69D. Anther shape: Broadly oblong. Anther length: About 0.5 mm. Anther color: Close to N77D. Pollen amount: Moderate. Pollen color: Close to 156D. Pistils: Pistil quantity per flower: Three, occasionally two or four. Pistil length: About 1.5 mm. Stigma shape: Club-shaped. Stigma color: Close to 69D. Style length: About 1 mm. Style color: Close to 69C. Ovary color: Close to 150D.

Seeds.—To date, seed development has not been observed on plants of the new *Hydrangea*.

Pathogen & pest resistance: To date, plants of the new *Hydrangea* have not been observed to be resistant to pathogens and pests common to *Hydrangea* plants.

Temperature tolerance: Plants of the new *Hydrangea* have been shown to be suitable for USDA Hardiness Zones 5 through 9.

It is claimed:

1. A new and distinct *Hydrangea* plant named 'HI SKY' as illustrated and described.

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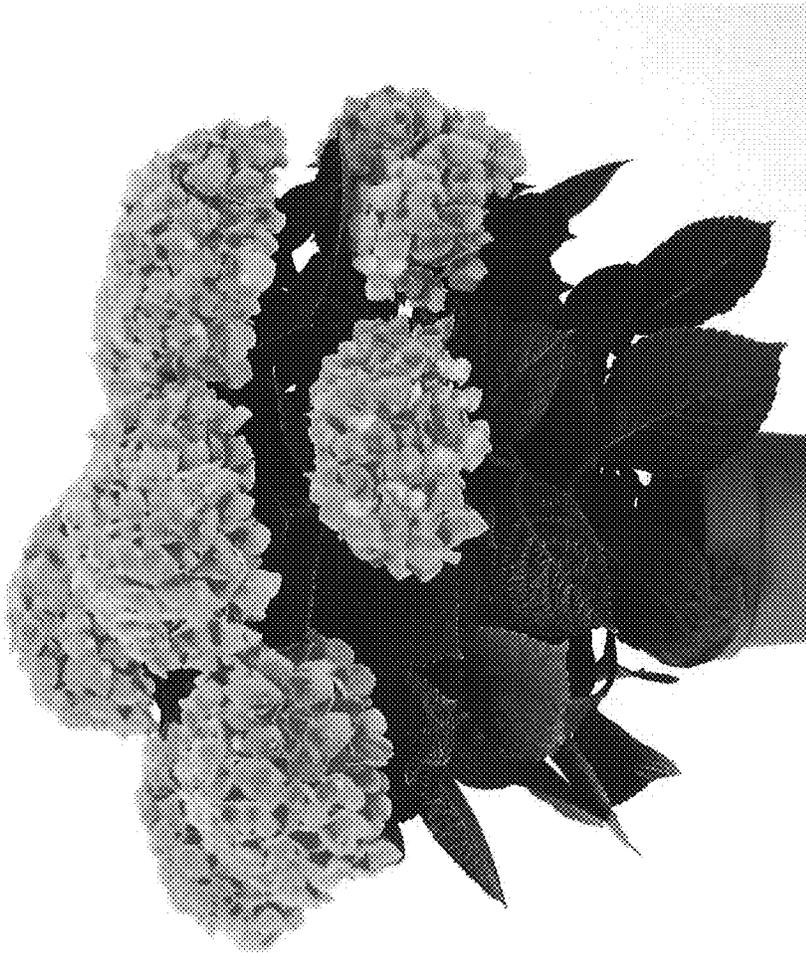


FIG. 1

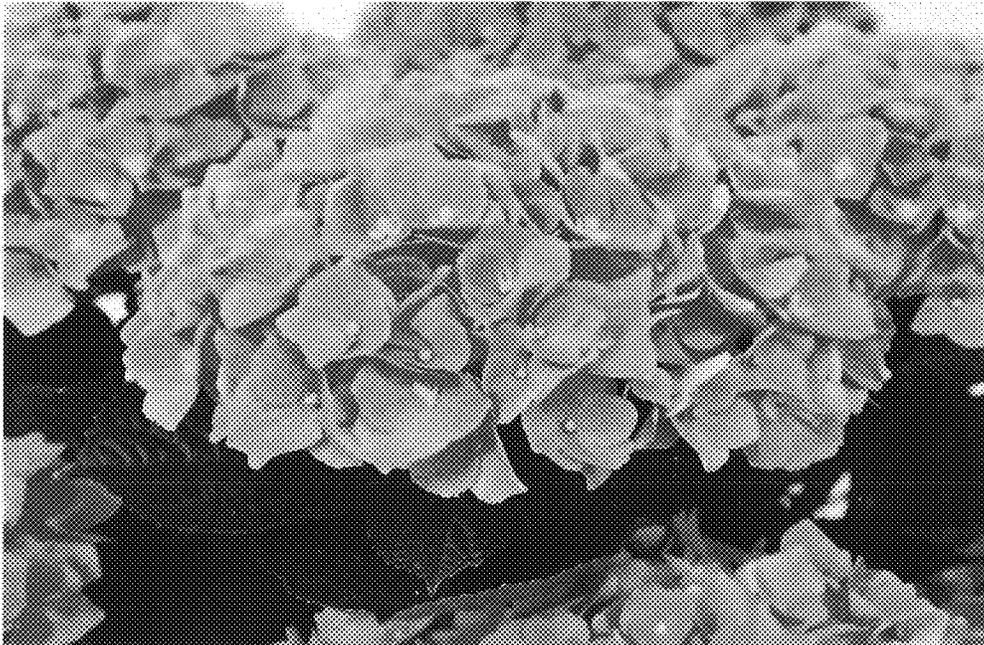


FIG. 2



FIG. 3