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(54) **HYDRANGEA PLANT NAMED ‘HP221904’**

(50) Latin Name: *Hydrangea paniculata*
Varietal Denomination: **HP221904**

(71) Applicant: **HYDRANGEA BREEDERS ASSOCIATION B.V.**, De Kwakel (NL)

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(65) **Prior Publication Data**

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A01H 5/02 (2018.01)
A01H 6/48 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./250**
CPC **A01H 6/48** (2018.05); **A01H 5/02** (2013.01)

(58) **Field of Classification Search**
USPC Plt./250
CPC A01H 6/48; A01H 5/02
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Hydrangea* plant named ‘HP221904’, characterized by its relatively compact, upright to somewhat outwardly spreading and rounded to conical plant habit; vigorous growth habit and rapid growth rate; freely branching habit with strong, thick and sturdy stems; freely and uniformly flowering habit; large rounded conical inflorescences with numerous light yellow green-colored sterile flowers that become purplish red in the autumn; and good garden performance.

2 Drawing Sheets

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Botanical designation: *Hydrangea paniculata*.
Cultivar denomination: ‘HP221904’.

CROSS-REFERENCED TO CLOSELY-RELATED APPLICATIONS

Title: *Hydrangea* Plant Named ‘HP221903’
Inventor: Niels Arts
Filed: May 23, 2023
Title: *Hydrangea* Plant Named ‘HP221905’
Inventor: Niels Arts
Filed: May 23, 2023

An European Community Plant Breeder’s Rights application for the instant plant was filed by the Applicant, *Hydrangea* Breeders Association B.V. of De Kwakel, The Netherlands, on Mar. 7, 2023, application number 2023/0570. Foreign priority is not claimed to this application.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Hydrangea* plant, botanically known as *Hydrangea paniculata*, commercially referred to as a panicle *Hydrangea* and hereinafter referred to by the name ‘HP221904’.

The new *Hydrangea* plant is a product of a planned breeding program conducted by the Inventor in De Kwakel, The Netherlands and Lengerich, Germany. The objective of the breeding program was to create new compact and freely-branching *Hydrangea* plants with strong and sturdy stems, large inflorescences with numerous showy sterile flowers, attractive sterile flower color, high temperature tolerance and good garden performance.

The new *Hydrangea* plant originated from a self-pollination made by the Inventor during the summer of 2013 in De

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Kwakel, The Netherlands, of *Hydrangea paniculata* ‘HP217901’, disclosed in U.S. Plant Pat. No. 30,307. The new *Hydrangea* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated self-pollination in a controlled greenhouse environment in Lengerich, Germany during the summer of 2015.

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

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 ‘HP221904’. These characteristics in combination distinguish ‘HP221904’ as a new and distinct *Hydrangea* plant:

1. Relatively compact, upright to somewhat outwardly spreading and rounded to conical plant habit.
2. Vigorous growth habit and rapid growth rate.
3. Freely branching habit with strong, thick and sturdy stems.
4. Freely and uniformly flowering habit.

5. Large rounded conical inflorescences with numerous light yellow green-colored sterile flowers that become purplish red in the autumn.
6. Good garden performance.

Plants of the new *Hydrangea* can be compared to plants of the parent, 'HP217901'. Plants of the new *Hydrangea* differ primarily from plants of 'HP217901' in flowering habit as plants of the new *Hydrangea* have more sterile flowers than inflorescences of plants of 'HP217901'. In addition, plants of the new *Hydrangea* flower later than plants of 'HP217901'.

Plants of the new *Hydrangea* can be compared to plants of *Hydrangea paniculata* 'HP221903', disclosed in a U.S. Plant Patent application filed concurrently. In side-by-side comparisons, plants of the new *Hydrangea* differ primarily from plants of 'HP221903' in the following characteristics:

1. Plants of the new *Hydrangea* are taller and narrower than plants of 'HP221903'.
2. Plants of the new *Hydrangea* are not as freely branching as plants of 'HP221903'.
3. Plants of the new *Hydrangea* flower later than plants of 'HP221903'.
4. Plants of the new *Hydrangea* have larger inflorescences than plants of 'HP221903'.
5. Inflorescences of plants of the new *Hydrangea* are rounded conical in shape whereas inflorescences of plants of 'HP221903' are pyramidal to conical in shape.
6. Inflorescences of plants of the new *Hydrangea* have fewer fertile and sterile flowers than inflorescences of plants of 'HP221903'.
7. Plants of the new *Hydrangea* have larger sterile flowers than plants of 'HP221903'.
8. Sterile sepals of plants of the new *Hydrangea* are not as white in color as sterile sepals of plants of 'HP221903'.

Plants of the new *Hydrangea* can be compared to plants of *Hydrangea paniculata* 'HP221905', disclosed in a U.S. Plant Patent application filed concurrently. In side-by-side comparisons, plants of the new *Hydrangea* differ primarily from plants of 'HP221905' in the following characteristics:

1. Plants of the new *Hydrangea* are taller and narrower than plants of 'HP221905'.
2. Plants of the new *Hydrangea* flower later than plants of 'HP221905'.
3. Inflorescences of plants of the new *Hydrangea* are rounded conical in shape whereas inflorescences of plants of 'HP221905' are pyramidal to conical in shape.
4. Inflorescences of plants of the new *Hydrangea* have more sterile flowers than inflorescences of plants of 'HP221905'.
5. Sterile sepals of plants of the new *Hydrangea* are not as white in color as sterile sepals of plants of 'HP221905'.
6. Sterile sepals of plants of the new *Hydrangea* become purplish red in color in the autumn whereas sterile sepals of plants of 'HP221905' do not change color in the autumn.

Plants of the new *Hydrangea* can also be compared to plants of the *Hydrangea paniculata* 'HP217902', disclosed in U.S. Plant Pat. No. 30,332. In side-by-side comparisons, plants of the new *Hydrangea* differ primarily from plants of 'HP217902' in the following characteristics:

1. Plants of the new *Hydrangea* are taller and narrower than plants of 'HP217902'.

2. Plants of the new *Hydrangea* flower later than plants of 'HP217902'.
3. Inflorescences of plants of the new *Hydrangea* are rounded conical in shape whereas inflorescences of plants of 'HP217902' are broadly pyramidal in shape.
4. Plants of the new *Hydrangea* have larger sterile flowers than plants of 'HP217902'.
5. Inflorescences of plants of the new *Hydrangea* have more fertile flowers than inflorescences of plants of 'HP217902'.

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 'HP221904' grown in a container.

The photograph on the second sheet (FIG. 2) is a close up view of a typical inflorescence of 'HP221904'.

DETAILED BOTANICAL DESCRIPTION

Plants used in the aforementioned photographs and in the following description were grown during the summer in 17-cm containers in an outdoor nursery in Lengerich, Germany and under cultural practices typical of commercial panicle *Hydrangea* production. During the production of the plants, day and night temperatures averaged 15° C. Plants of the new *Hydrangea* were 17 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.

Botanical description: *Hydrangea paniculata* 'HP221904'.
Parentage:

Female, or seed, parent.—*Hydrangea paniculata* 'HP217901', disclosed in U.S. Plant Pat. No. 30,307.

Male, or pollen, parent.—*Hydrangea paniculata* 'HP217901', disclosed in U.S. Plant Pat. No. 30,307.

Propagation:

Type cutting.—By vegetative tip cuttings.

Time to initiate roots, summer.—About two weeks at temperatures about 23° C.

Time to initiate roots, winter.—About 18 days at temperatures about 18° C.

Time to produce a rooted young plant, summer.—About four weeks at temperatures about 23° C.

Time to produce a rooted young plant, winter.—About five weeks at temperatures about 18° C.

Root description.—Thick; typically whitish brown 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.—Freely branching; dense.

Plant description:

Plant and growth habit.—Relatively compact, upright to somewhat outwardly spreading and rounded to conical plant habit; strong and sturdy stems; vigorous growth habit and rapid growth rate.

Plant height.—About 55 cm to 60 cm.

Plant diameter or area of spread.—About 40 cm to 50 cm.

Lateral branch description:

Branching habit.—Freely branching habit; when pinched, about twelve lateral branches develop per plant.

Length, stem axis to base of inflorescence.—About 50 cm to 55 cm.

Diameter.—About 7 mm.

Internode length.—About 4 cm to 6 cm.

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

Aspect.—Mostly upright.

Strength.—Strong, sturdy.

Color.—When developing: Close to 147C. Developed: Close to 177A. Lenticels: Close to 165C.

Leaf description:

Arrangement.—Opposite, simple.

Length.—About 7 cm to 8 cm.

Width.—About 5 cm to 6 cm.

Shape.—Ovate.

Apex.—Acute.

Base.—Obtuse.

Margin.—Serrulate.

Texture, upper and lower surfaces.—Rugose, prominent venation; pubescent.

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to 146A. Developing leaves, lower surface: Close to 147B. Fully developed leaves, upper surface: Close to 137A; venation, close to 146B. Fully developed leaves, lower surface: Close to 147B; venation, close to 146C.

Petioles.—Length: About 1.5 cm to 2 cm. Diameter: About 2 mm to 3 mm. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: Close to 146B.

Flower description:

Flower type and habit.—Small and inconspicuous fertile flowers and showy sterile flowers arranged on terminal panicles; fertile and sterile flowers round in shape; panicles rounded conical in shape; fertile and sterile flowers face upright to outwardly depending on their position in the inflorescence.

Fragrance.—None detected.

Natural flowering season.—Plants begin flowering about 16 weeks after cold treatment; flowering begins in the early summer and is continuous throughout the summer in Northern Europe.

Flower longevity.—Fertile flowers last about one month on the plant, fertile flowers not persistent; sterile flowers last about three months on the plant, sterile flowers persistent.

Quantity of flowers.—Freely flowering habit; about 200 to 300 fertile flowers develop per panicle and about 400 to 500 sterile flowers develop per panicle.

Panicle height.—About 15 cm.

Panicle diameter.—About 20 cm.

Fertile flower buds.—Length: About 3 mm. Diameter: About 2 mm. Shape: Rounded. Color: Close to 145A.

Sterile flower buds.—Length: About 3 mm. Diameter: About 2 mm. Shape: Rounded. Color: Close to 145A.

Fertile flower diameter.—About 3 mm to 3 mm.

Fertile flower depth (height).—About 2 mm.

Sterile flower diameter.—About 3.5 cm to 4 cm.

Sterile flower depth (height).—About 1 cm.

Petals, fertile flowers.—Quantity and arrangement: About five in a single whorl. Length: About 2 mm. Width: About 2 mm. Shape: Ovate. Apex: Acute. Base: Obtuse. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper and lower surfaces: Close to 145C. Fully opened, upper and lower surfaces: Close to 145D; color does not change with subsequent development.

Petals, sterile flowers.—Quantity and arrangement: About four in a single whorl. Length: About 1 mm to 2 mm. Width: About 1 mm. Shape: Ovate. Apex: Acute. Base: Cuneate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper and lower surfaces: Close to 145B. Fully opened, upper and lower surfaces: Close to 145D; color does not change with subsequent development.

Sepals, fertile flowers.—Quantity and arrangement: About five in a single whorl. Length: About 1 mm. Width: About 1 mm. Shape: Ovate. Apex: Acute. Base: Fused. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper and lower surfaces: Close to 145C. Fully opened, upper and lower surfaces: Close to 145B; color does not change with subsequent development.

Sepals, sterile flowers.—Quantity and arrangement: About four in a single whorl; slightly imbricate. Length: About 1.5 cm to 2 cm. Width: About 1 cm to 1.5 cm. Shape: Elliptic to oval. Apex: Obtuse. Base: Obtuse. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper and lower surfaces: Close to 145B. Fully opened, upper and lower surfaces: Close to 145D; color becoming close to 63A in the autumn.

Pedicels, fertile flowers.—Length: About 1 mm to 2 mm. Diameter: About 1 mm to 2 mm. Strength: Strong. Aspect: Mostly upright. Texture: Smooth, glabrous. Color: Close to 145C.

Pedicels, sterile flowers.—Length: About 2 cm. Diameter: About 2 mm to 3 mm. Strength: Strong. Aspect: About 80 to 90 degrees from branch axis. Texture: Smooth, glabrous. Color: Close to 145D.

Reproductive organs, fertile flowers.—Stamens: Quantity per flower: About nine to ten. Filament length: About 3 mm. Filament color: Close to 157D. Anther length: About 1 mm. Anther shape: Round. Anther color: Close to 157D. Pollen amount: Moderate. Pollen color: Close to 155A. Pistils: Pistil quantity per flower: One. Pistil length: About 0.5 mm to 1 mm. Stigma shape: Three-lobed. Stigma color: Close to 145B. Style length: About 0.5 mm. Style color: Close to 145B. Ovary color: Close to 145B.

Reproductive organs, sterile flowers.—Stamens: Quantity per flower: About nine to ten. Filament length: About 3 mm. Filament color: Close to 157D. Anther length: About 1 mm. Anther shape: Round. Anther color: Close to 157D. Pollen amount: Scarce. Pollen color: Close to 155A. Pistils: To date, pistil development has not been observed on plants of the new *Hydrangea*.

Seeds, only produced by fertile flowers.—Quantity per fertile flower: About 20 to 30. Length: Less than 0.5 mm. Diameter: Less than 0.5 mm. Color: Close to 199A.

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

Garden performance: Plants of the new *Hydrangea* have been shown to have good garden performance and to be tolerant to temperatures ranging from about -38° C. to about 38° C.

It is claimed:

1. A new and distinct *Hydrangea* plant named 'HP221904' as herein illustrated and described.

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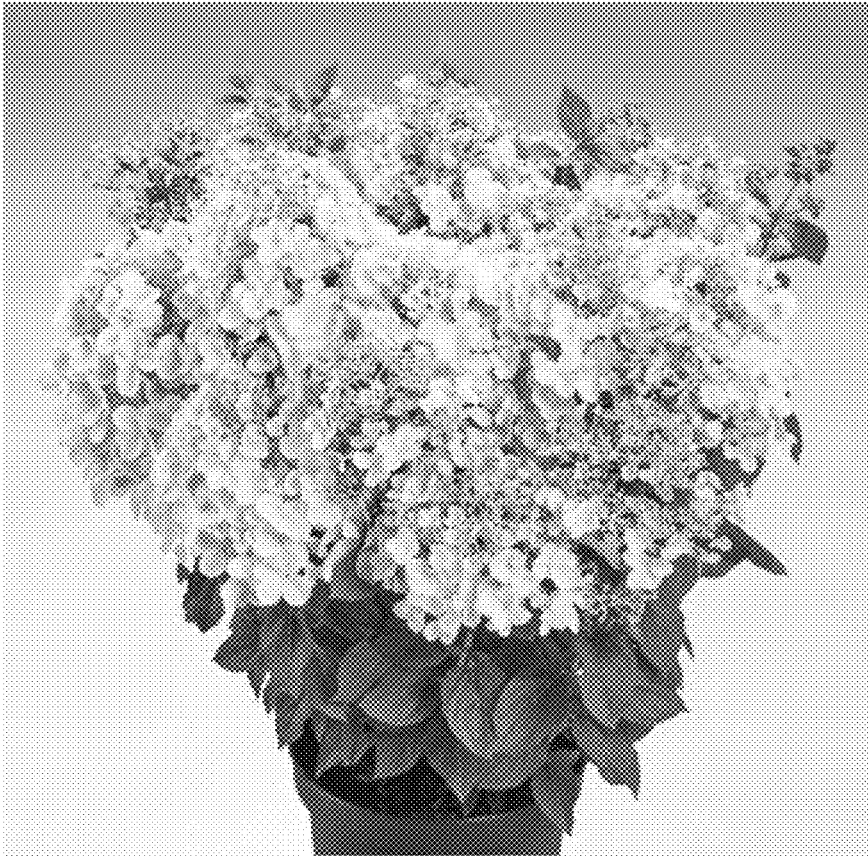


FIG. 1



FIG. 2