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(12) United States Plant Patent Post**(10) Patent No.: US PP30,718 P3
(45) Date of Patent: Jul. 16, 2019****(54) CHRYSANTHEMUM PLANT NAMED 'DLFBRA7'****(50) Latin Name: *Chrysanthemum X morifolium*
Varietal Denomination: DLFBRA7****(71) Applicant: Arie Gerard Post, Delft (NL)****(72) Inventor: Arie Gerard Post, Delft (NL)****(73) Assignee: Deliflor Royalties B.V., Maasdijk (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.**(21) Appl. No.: 15/932,786****(22) Filed: Apr. 23, 2018****(65) Prior Publication Data**

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A01H 6/14 (2018.01)**(52) U.S. Cl.**
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See application file for complete search history.*Primary Examiner* — Kent L Bell**(74) Attorney, Agent, or Firm** — C. A. Whealy**(57) ABSTRACT**A new and distinct cultivar of *Chrysanthemum* plant named 'DLFBRA7', characterized by its strong and upright flowering stems; vigorous growth habit; relatively short response time; uniform and freely flowering habit; decorative inflorescences with dark red purple-colored ray florets; and good postproduction longevity.**2 Drawing Sheets****1**Botanical designation: *Chrysanthemum X morifolium*.
Cultivar denomination: 'DLFBRA7'.**BACKGROUND OF THE INVENTION**The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum X morifolium*, commercially grown as a cut flower and hereinafter referred to by the name 'DLFBRA7'.The new *Chrysanthemum* plant is a product of a planned breeding program conducted by the Inventor in Maasdijk, The Netherlands. The objective of the breeding program is to create new freely-flowering cut *Chrysanthemum* plants with decorative inflorescences, strong flowering stems and excellent postproduction longevity.The new *Chrysanthemum* plant originated from a cross-pollination made by the Inventor in Maasdijk, The Netherlands in February, 2012, of a proprietary selection of *Chrysanthemum X morifolium* identified as code designation db 33586, not patented, as the female, or seed, parent with a proprietary selection of *Chrysanthemum X morifolium* identified as code designation db 42809, not patented, as the male, or pollen, parent. The new *Chrysanthemum* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Maasdijk, The Netherlands in December, 2013.Asexual reproduction of the new *Chrysanthemum* plant by terminal vegetative cuttings in a controlled greenhouse environment in Maasdijk, The Netherlands since December, 2013 has shown that the unique features of this new *Chrysanthemum* plant are stable and reproduced true to type in successive generations.**SUMMARY OF THE INVENTION**Plants of the new *Chrysanthemum* have not been observed under all possible combinations of environmental conditions**2**

and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature, daylength 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 'DLFBRA7'. These characteristics in combination distinguish 'DLFBRA7' as a new and distinct *Chrysanthemum* plant:

1. Strong and upright flowering stems.
2. Vigorous growth habit.
3. Relatively short response time.
4. Uniform and freely flowering habit.
5. Decorative inflorescences with dark red purple-colored ray florets.
6. Good postproduction longevity; plants maintain good substance for about two weeks in an interior environment.

Plants of the new *Chrysanthemum* differ from plants of the female parent selection in the following characteristics:

1. Leaves of plants of the new *Chrysanthemum* are not as glossy as leaves of plants of the female parent selection.
2. Plants of the new *Chrysanthemum* flower about one week earlier than plants of the female parent selection.
3. Plants of the new *Chrysanthemum* and the female parent selection differ in ray floret color as plants of the female parent selection have lighter red purple-colored ray florets.

Plants of the new *Chrysanthemum* differ from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* have decorative inflorescences whereas plants of the male parent selection have semi-double inflorescences.

2. Plants of the new *Chrysanthemum* and the male parent selection differ in ray floret color as plants of the male parent selection have red-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum X morifolium* 'Delibarca', not patented. In side-by-side comparisons plants of the new *Chrysanthemum* differ from plants of 'Delibarca' in the following characteristics:

1. Plants of the new *Chrysanthemum* have decorative inflorescences whereas plants of 'Delibarca' have semi-double inflorescences.
2. Ray florets of plants of the new *Chrysanthemum* are reflexed at the apex whereas ray florets of plants of 'Delibarca' do not reflex.

Plants of the new *Chrysanthemum* can be compared to plants of *Chrysanthemum X morifolium* 'DLFBLO4', not patented. In side-by-side comparisons plants of the new *Chrysanthemum* differ from plants of 'DLFBLO4' in the following characteristics:

1. Plants of the new *Chrysanthemum* and 'DLFBLO4' differ in ray floret color as plants of 'DLFBLO4' have greyed purple-colored ray florets.
2. Ray florets of plants of the new *Chrysanthemum* are reflexed at the apex whereas ray florets of plants of 'DLFBLO4' do not reflex.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Chrysanthemum* 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 *Chrysanthemum* plant.

The photograph on the first sheet comprises a side perspective view of a typical flowering stem of 'DLFBRA7' grown as a spray-type.

The photograph on the second sheet comprises close-up views of the lower (top of the photographic sheet) and upper surfaces (bottom of the photographic sheet) of typical inflorescences and leaves of 'DLFBRA7'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown during the winter in ground beds in a glass-covered greenhouse in Maasdijk, The Netherlands and under cultural practices typical of commercial cut *Chrysanthemum* production. Plants were initially given long day/short night treatments followed by short day/long night treatments to induce flower initiation and development. During the production of the plants, day temperatures ranged from 18° C. to 20° C., night temperatures ranged from 19° C. to 20° C. and light levels averaged 8 klux. Plants were nine weeks old when the photographs and the 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 classification:

Chrysanthemum X morifolium 'DLFBRA7'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code designation db 33586, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code designation db 42809, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About six days at temperatures about 24° C.

Time to initiate roots, winter.—About eight days at temperatures about 22° C.

Time to produce a rooted young plant, summer.—About twelve days at temperatures about 24° C.

Time to produce a rooted young plant, winter.—About two weeks at temperatures about 22° C.

Root description.—Fine, fibrous; typically light brown in color, actual color of the roots is dependent on substrate composition, water quality, fertilizers, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching, medium density.

Plant description:

Plant and growth habit.—Herbaceous decorative cut flower that is typically grown as a spray-type; upright plant habit; vigorous growth habit and rapid growth rate.

Plant height, soil level to top of foliar plane.—About 65 cm.

Plant height, soil level to top of flower plane.—About 75 cm.

Plant (spray) diameter.—About 22.7 cm.

Flowering stem length.—About 50 cm.

Flowering stem diameter.—About 6 mm.

Flowering stem internode length.—About 2.5 cm.

Flowering stem strength.—Strong.

Flowering stem aspect.—Erect.

Flowering stem texture and luster.—Densely pubescent; slightly glossy.

Flowering stem color, developing.—Close to 143C.

Flowering stem color, developed.—Close to 143C.

Leaf description.—Arrangement: Alternate; simple.

Length: About 12.3 cm. Width: About 8.3 cm. Shape:

Ovate. Apex: Short apiculate. Base: Attenuate. Margin: Palmately lobed, coarsely crenate; sinuses convergent and medium to medium-deep in depth. Texture and luster, upper surface: Densely pubescent, not rugose; moderately velvety; matte. Texture and luster, upper surface: Densely pubescent, prominent venation; slightly to moderately velvety; matte. Venation pattern: Pinnate, reticulate. Color: Developing leaves, upper surface: Close to 137B. Developing leaves, lower surface: Close to 138B. Fully developed leaves, upper surface: Close to 139A; venation, close to 144A. Fully developed leaves, lower surface: Close to 147B; venation, close to 146C. Petioles: Length: About 2.1 cm. Diameter: About 2.5 mm by 3 mm. Strength: Moderately strong. Texture and luster, upper and lower surfaces: Moderately to densely pubescent; matte. Color, upper surface: Close to 144A; edges, close to 137A. Color, lower surface: Close to 146C; edges, close to 138A. Stipules: Quantity and appearance: Two leafy stipules, opposite, at the petiole attachment to the stem. Length: About 8 mm. Width: About 8 mm. Shape: Orbicular to broadly obovate. Texture and luster, upper and lower surfaces: Densely pubescent; matte. Color, upper surface: Close to 139A. Color, lower surface: Close to 147B.

Inflorescence description:

Appearance.—Decorative inflorescence form with obovate-shaped ray florets and tubular disc florets; inflorescences borne perpendicular to peduncles and face mostly upright to slightly outwardly; ray and disc florets develop acropetally on a capitulum.

Fragrance.—Faintly fragrant.

Flowering response.—Under natural conditions, plant flower in the autumn/winter in the Northern Hemisphere; at other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness); uniform flowering habit and short response time, plants exposed to two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 50 days later when grown as a spray-type.

Postproduction longevity.—Good postproduction longevity; in an interior environment, inflorescences and foliage will maintain good color and substance for about two weeks; inflorescences persistent.

Quantity of inflorescences.—Freely flowering habit; when grown as a spray type, about 32 inflorescences develop per flowering stem.

Inflorescence size.—Diameter: About 6.8 cm. Depth (height): About 3.7 cm. Disc diameter: About 8 mm.

Receptacles.—Height: About 3 mm. Diameter: About 5 mm. Shape: Flattened globular. Color: Close to 145C.

Inflorescence buds.—Height: About 8 mm. Diameter: About 8 mm. Shape: Roughly globular. Texture and luster: Slightly pubescent; slightly glossy. Color: Close to 143A and 199D; towards the apex, close to N77B (immature ray florets).

Ray florets.—Quantity and arrangement: About 160 arranged in about six whorls. Length: About 2.8 cm. Width: About 1 cm. Shape: Obovate; slightly carinate. Apex: Shallowly praemorse. Base: Attenuate. Margin: Entire; slightly undulate. Aspect: Initially upright to about 70° from vertical. Texture and luster, upper surface: Smooth, glabrous; velvety; matte. Texture and luster, lower surface: Smooth, glabrous; slightly velvety; very slightly glossy. Color: When opening, upper surface: Slightly darker than between 61A and 71A. When opening, lower surface: Close to N80B to N80C. Fully opened, upper surface: Slightly darker than between 59A and 61A; venation, similar to lamina color; color does not fade with development. Fully opened, lower surface: Close to 64A to 64B; venation, close to 64A; color does not fade with development.

Disc florets.—Quantity and arrangement: About 60 spirally arranged in about five whorls at the center of the receptacle. Length: About 6 mm. Diameter:

About 2 mm. Shape: Lower 85% fused into a tube; upper 15% free. Apex: Acute. Margin: Entire. Texture and luster, inner and outer surfaces: Smooth, glabrous; glossy. Color, when opening, inner and outer surfaces: Apex: Close to 1A. Mid-section: Close to 15C. Base: Close to 145D. Color, fully opened, inner and outer surfaces: Apex: Close to 5A to 5B. Mid-section: Close to 15D. Base: Close to 145D.

Involucral bracts.—Quantity and arrangement: About 24 arranged in two whorls. Length: About 9 mm. Width: About 4 mm. Shape: Ovate. Apex: Obtuse. Base: Cuneate. Margin: Entire. Texture and luster, upper surface: Smooth, glabrous; glossy. Texture and luster, lower surface: Moderately pubescent; matte. Color, upper surface: Close to 143A; margins, translucent, and close to 199D. Color, lower surface: Close to 137A and 137B; margins, translucent, close to 199D.

Peduncles.—Length, terminal peduncle: About 3.2 cm. Diameter, terminal peduncle: About 2 mm. Length, third peduncle: About 5.1 cm. Diameter, third peduncle: About 2 mm. Strength: Strong. Aspect, terminal peduncle: Mostly upright. Aspect, third peduncle: About 35° from the flowering stem axis. Texture and luster: Densely pubescent; matte. Color: Close to 137C.

Reproductive organs.—Androecium: Present on disc florets only. Quantity: About five per floret. Filament length: About 2 mm. Filament color: Close to 145D. Anther size: About 0.5 mm by 1 mm. Anther shape: Narrowly oblong. Anther color: Close to 12A. Pollen amount: Scarce. Pollen color: Close to 14A to 14B. Gynoecium: Present on both ray and disc florets. Quantity: One per floret. Pistil length: About 5.5 mm. Style length: About 4.5 mm. Style color: Close to N144D. Stigma diameter: About 1.5 mm. Stigma shape: Cleft, decurrent. Stigma color: Close to 1B. Ovary color: Close to 145D.

Seeds and fruits.—Seed and fruit production have not been observed on plants of the new *Chrysanthemum* to date.

Disease & pest resistance: Plants of the new *Chrysanthemum* have been observed to be resistant to Fusarium Wilt (*Fusarium oxysporum* f. sp. *chrysanthemi*). Resistance to pests and other pathogens common to *Chrysanthemum* plants has not been observed on plants of the new *Chrysanthemum* grown under commercial conditions.

Temperature tolerance: Plants of the new *Chrysanthemum* have been observed to tolerate temperatures ranging from about -12° C. to 35° C.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'DLFBRA7' as illustrated and described.

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