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**Vandenberg**

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(54) **CHRYSANTHEMUM PLANT NAMED ‘MAGNET’**

(50) Latin Name: *Chrysanthemum*×*morifolium*  
Varietal Denomination: **Magnet**

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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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(57) **ABSTRACT**

A distinct cultivar of Chrysanthemum plant named ‘Magnet’, characterized by its upright plant habit; freely flowering habit; small decorative-type inflorescences that are about 4.1 cm in diameter; attractive ray florets that are initially green and mature slowly, with development, ray florets become white giving a bi-colored appearance to the inflorescence; response time about 47 days; dark green-colored foliage; strong peduncles; and good postproduction longevity with inflorescences and foliage maintaining good substance and color for about 14 to 18 days in an interior environment.

**2 Drawing Sheets**

Botanical classification/cultivar designation: *Chrysanthemum*×*morifolium* cultivar Magnet.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Chrysanthemum*×*morifolium* and hereinafter referred to by the name ‘Magnet’.

The new Chrysanthemum is a product of a planned breeding program conducted by the Inventor in Salinas, Calif. and Alva, Fla. The objective of the breeding program is to create new cut Chrysanthemum cultivars having inflorescences with desirable colors and good form and substance.

The new Chrysanthemum originated from a cross-pollination made by the Inventor in November, 1997, in Salinas, Calif., the *Chrysanthemum*×*morifolium* cultivar Green Bay, disclosed in U.S. Plant Pat. No. 12,003, as the female, or seed, parent with a proprietary *Chrysanthemum*×*morifolium* seedling selection identified as E488, not patented, as the male, or pollen, parent.

The cultivar Magnet was discovered and selected by the Inventor as a flowering plant within the progeny of the stated cross-pollination in a controlled environment in Alva, Fla., in November, 1998. The selection of this plant was based on its desirable inflorescence color and good form and substance.

Asexual reproduction of the new Chrysanthemum by terminal cuttings taken in a controlled environment in Alva, Fla. since February, 1999, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

**SUMMARY OF THE INVENTION**

Plants of the cultivar Magnet have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment 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 ‘Magnet’. These characteristics in combination distinguish ‘Magnet’ as a new and distinct cultivar:

1. Upright cut Chrysanthemum that is usually grown as a natural spray.
2. Freely flowering habit, about nine inflorescences per flowering stem.
3. Small decorative-type inflorescences that are about 4.1 cm in diameter.
4. Attractive ray florets that are initially bright green in color that mature slowly; with development, ray florets become white giving a bi-colored appearance to the inflorescence.
5. Early flowering, response time about 47 days.
6. Dark green foliage.
7. Strong peduncles.
8. Good postproduction longevity with inflorescences and foliage maintaining good substance and color for about 14 to 18 days in an interior environment.

Plants of the new Chrysanthemum are most similar to plants of the female parent, the cultivar Green Bay. In side-by-side comparisons conducted in Alva, Fla., plants of the new Chrysanthemum differed from plants of the cultivar Green Bay in the following characteristics:

1. Plants of the new Chrysanthemum were taller than plants of the cultivar Green Bay.
2. Plants of the new Chrysanthemum flowered earlier than plants of the cultivar Green Bay.
3. Plants of the new Chrysanthemum were more freely flowering than plants of the cultivar Green Bay.

Plants of the new Chrysanthemum can be compared to plants of the male parent selection. In side-by-side comparisons conducted in Alva, Fla., plants of the new Chrysanthemum



mum differed from plants of the male parent selection in the following characteristics:

1. Plants of the new Chrysanthemum had smaller inflorescences than plants of the male parent selection.
2. Plants of the new Chrysanthemum and the male parent selection differed in ray floret coloration as ray florets of plants of the male parent selection were more pure white in color.
3. Inflorescences of plants of the new Chrysanthemum did not produce pollen whereas inflorescences of plants of the male parent selection produced pollen.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

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

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

The photograph on the second sheet comprises a close-up view of a typical flowering stem of 'Magnet' grown as a natural spray.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The aforementioned photographs and following observations and measurements describe plants grown in La Ceja, Antioquia, Colombia, South America, under conditions which approximate commercial practice in a single-layer polyethylene-covered greenhouse. Two-week old rooted cuttings were planted on Aug. 19, 2002 and received 14 long day/short nights followed by short day/long nights until flowering. Plants were grown as single-stem natural spray cut Chrysanthemums. During the production time, the following environmental conditions were measured: day temperatures, 20 to 27° C.; night temperatures, 8 to 13° C.; and light levels, 4,000 to 6,000 foot-candles. Measurements and numerical values represent averages for six to ten typical flowering stems and were taken about ten weeks after the start of short days.

Botanical classification: *Chrysanthemum*×*morifolium* cultivar Magnet.

Commercial classification: Decorative-type cut Chrysanthemum.

Parentage:

*Female or seed parent.*—*Chrysanthemum*×*morifolium* cultivar Green Bay, disclosed in U.S. Plant Pat. No. 12,003.

*Male or pollen parent.*—Proprietary *Chrysanthemum*×*morifolium* seedling selection identified as code number E488, not patented.

Propagation:

*Type.*—Terminal tip cuttings.

*Time to rooting.*—About 10 to 14 days with soil temperatures of 18 to 21° C.

*Root description.*—Fine, fibrous and well-branched.

Plant description:

*Appearance.*—Herbaceous decorative-type cut flower that is typically grown as a natural spray.

*Flowering stem description.*—Aspect: Erect. Length: About 119 cm. Diameter (natural spray diameter): About 10.5 cm. Diameter (base of stem): About 5.5 mm. Internode length: About 4.1 cm. Texture: Pubescent; longitudinally ridged. Color: 146A to close to 144A.

*Foliage description.*—Arrangement: Alternate. Length: About 8.7 cm. Width: About 3.6 cm. Apex: Mucronate. Base: Attenuate to truncate. Margin: Palmately lobed; sinuses divergent. Texture: Upper and lower surfaces pubescent; smooth and leathery; veins prominent on lower surface. Color: Developing foliage, upper surface: Darker green than 147A. Developing foliage, lower surface: Darker green than 147B. Fully expanded foliage, upper surface: 147A. Fully expanded foliage, lower surface: 147B. Venation, upper surface: 147A to 147B. Venation, lower surface: 147B to 147C. Petiole: Length: About 1.8 cm. Diameter: About 3.5 mm. Color: Upper surface: 147C. Lower surface: Close to 147C.

Flowering description:

*Appearance.*—Decorative-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals, arising from leaf axils. Disc and ray florets develop acropetally on a capitulum.

*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). Early flowering; plants exposed to two weeks of long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 47 days later when grown as a natural spray.

*Postproduction longevity.*—In an interior environment, inflorescences and foliage will maintain good color and substance for about 14 to 18 days in an interior environment.

*Quantity of inflorescences.*—Freely flowering habit, about nine inflorescences per stem develop.

*Inflorescence size.*—Diameter: About 4.1 cm. Depth (height): About 1.6 cm. Diameter of disc: About 1.5 mm; inconspicuous. Diameter of receptacle: About 5 mm.

*Inflorescence buds.*—Shape: Oblate. Height: About 9 mm. Diameter: About 1 cm. Color: Close to 147A.

*Ray florets.*—Shape: Elongated oblong; slightly concave to flat. Length: About 1.8 cm. Width: About 7 mm. Corolla tube length: About 3 mm. Apex: Acute to emarginate. Base: Fused. Texture: Smooth, velvety, glabrous; longitudinally ridged. Aspect: Initially upright; when mature, eventually perpendicular to the peduncle. Number of ray florets per inflorescence: Numerous, more than 200 arranged in numerous rows. Color: When opening, upper and lower surfaces: 144A; ray florets are slow to mature giving a bi-colored appearance to the inflorescence. Fully opened, upper and lower surface: Close to 155A; towards the apex, close to 144A to 144B; ray florets eventually becoming completely white with development.

*Disc florets.*—Shape: Tubular, elongated. Length: About 2.5 mm. Width: Apex: About 1 mm. Base:

About 1 mm. Number of disc florets per inflorescence: Few, typically less than ten. Color: Immature: 144A. Mature: Apex: 154A. Mid-section: Close to 146D. Base: Close to 155D.

*Phyllaries*.—Quantity per inflorescence: About 24. Length: About 5 mm. Width: About 2.5 mm. Shape: Lanceolate to deltoid. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Smooth, waxy. Texture, lower surface: Pubescent. Color, upper surface: Close to 146A. Color, lower surface: Close to 147A.

*Peduncles*.—Length: First peduncle: About 12.5 cm. Fourth peduncle: About 16 cm. Seventh peduncle: About 21 cm. Diameter: About 3 mm. Angle: About 30° from vertical, Strength: Strong. Texture: Pubescent. Color: 146A.

*Reproductive organs*.—Androecium: Present on disc florets only. Anther color: 9A. Amount of pollen: None observed. Gynoecium: Present on both ray and disc florets.

*Seed/fruit*.—Seed and fruit production has not been observed.

Disease/pest resistance: Resistance to pathogens and pests common to Chrysanthemums has not been observed on plants grown under commercial conditions.

Temperature tolerance: Plants of the new Chrysanthemum have demonstrated good tolerance to low temperatures of 5° C. and high temperatures high temperatures of 35° C. It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named 'Magnet', as illustrated and described.

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