



US00PP16265P2

(12) **United States Plant Patent**
Post(10) **Patent No.:** US PP16,265 P2
(45) **Date of Patent:** Feb. 14, 2006(54) **CHRYSANTHEMUM PLANT NAMED
'PANAMA'**(50) Latin Name: *Chrysanthemum×morifolium*
Varietal Denomination: Panama(75) Inventor: **Arie Gerard Post**, 's-Gravenzande
(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 14 days.

(21) Appl. No.: **10/920,855**(22) Filed: **Aug. 18, 2004**(51) **Int. Cl.**
A01H 5/00 (2006.01)(52) **U.S. Cl.** **Plt./290**(58) **Field of Classification Search** Plt./289,
Plt./290

See application file for complete search history.

Primary Examiner—Howard J. Locker(74) *Attorney, Agent, or Firm*—C. A. Whealy**ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named 'Panama', characterized by its decorative-type inflorescences with yellow orange-colored ray florets; freely flowering habit; early and uniform flowering response; and good postproduction longevity.

1 Drawing Sheet**1**

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

BACKGROUND OF THE INVENTION

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

The new *Chrysanthemum* is the product of a planned breeding program conducted by the Inventor in 's Gravenzande, The Netherlands. The objective of the breeding program is to create new vigorous cut *Chrysanthemum* cultivars with interesting inflorescence forms and attractive floret coloration.

The new *Chrysanthemum* originated from a cross-pollination on Mar. 29, 2000 in 's Gravenzande, The Netherlands, of the *Chrysanthemum×morifolium* cultivar Delifresh, not patented, as the female, or seed, parent with a proprietary seedling selection of *Chrysanthemum×morifolium* identified as code number 8556, not patented, as the male, or pollen, parent. The new *Chrysanthemum* was discovered and selected by the Inventor as a single plant within the progeny of the stated cross-pollination in a controlled environment in 's Gravenzande, The Netherlands.

Asexual reproduction of the new *Chrysanthemum* by terminal cuttings in a controlled environment in 's Gravenzande, The Netherlands since Jul. 27, 2001, has shown that the unique features of this new *Chrysanthemum* are stable and reproduced true to type in successive generations.

BRIEF SUMMARY OF THE INVENTION

The cultivar Panama has 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 'Panama'.

2

These characteristics in combination distinguish 'Panama' as a new and distinct cultivar:

1. Decorative-type inflorescences with yellow orange-colored ray florets; typically grown as a spray-type.
2. Freely flowering habit.
3. Early and uniform flowering response.
4. Good postproduction longevity.

Plants of the new *Chrysanthemum* can be compared to plants of the female parent, the cultivar Delifresh. In side-by-side comparisons conducted in 's Gravenzande, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the cultivar Delifresh in the following characteristics:

1. Plants of the new *Chrysanthemum* were more vigorous than plants of the cultivar Delifresh.
2. Plants of the new *Chrysanthemum* had decorative-type inflorescences whereas plants of the cultivar Delifresh had pompon-type inflorescences.
3. Plants of the new *Chrysanthemum* had larger inflorescences than plants of the cultivar Delifresh.
4. Plants of the new *Chrysanthemum* and the cultivar Delifresh differed in ray floret coloration as plants of the cultivar Delifresh had bright yellow-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. In side-by-side comparisons conducted in 's Gravenzande, The Netherlands, plants of the new *Chrysanthemum* differed from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* had smaller leaves than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* had smaller inflorescences than plants of the male parent selection.
3. Plants of the new *Chrysanthemum* and the male parent selection differed in ray floret coloration as plants of the male parent selection had white-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to plants of the *Chrysanthemum* cultivar Madera, disclosed in U.S. Plant Pat. No. 9,690. In side-by-side comparisons conducted in 's Gravenzande, The Netherlands, plants of the

new *Chrysanthemum* differed primarily from plants of the cultivar Madera in the following characteristics:

1. Plants of the new *Chrysanthemum* had smaller inflorescences than plants of the cultivar Madera.
2. Plants of the new *Chrysanthemum* and the cultivar Madera differed in ray floret coloration as plants of the cultivar Madera had darker yellow orange-colored ray florets.

Plants of the new *Chrysanthemum* can also be compared to plants of the *Chrysanthemum* cultivar Golden Albany, disclosed in U.S. Plant Pat. No. 10,406. In side-by-side comparisons conducted in 's Gravenzande, The Netherlands, plants of the new *Chrysanthemum* differed primarily from plants of the cultivar Golden Albany in the following characteristics:

1. Plants of the new *Chrysanthemum* had smaller inflorescences than plants of the cultivar Golden Albany.
2. Plants of the new *Chrysanthemum* and the cultivar Golden Albany differed in ray floret coloration as plants of the cultivar Golden Albany had bright yellow-colored ray florets.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar, 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 actual colors of the new *Chrysanthemum*.

The photograph at the top of the sheet comprises a side perspective view of a typical flowering stem of 'Panama'.

The photograph at the bottom left of the sheet is a close-up view of upper surface of a typical inflorescence and a typical leaf of 'Panama'.

The photograph at the bottom right of the sheet is a close-up view of lower surface of a typical inflorescence and a typical leaf of 'Panama'.

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 during the winter and early spring in 's Gravenzande, The Netherlands, under commercial practice in a glass-covered greenhouse. 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 averaged 18° C., night temperatures averaged 17° C. and light levels were about 4,000 lux. Plants were grown as spray-types and were about ten weeks from planting when the photographs and the description were taken.

Botanical classification: *Chrysanthemum × morifolium* cultivar Panama.

Commercial classification: Decorative-type *Chrysanthemum* typically grown as a spray-type cut flower.

Parentage:

Female, or seed, parent.—*Chrysanthemum × morifolium* cultivar Delifresh, not patented.

Male, or pollen, parent.—Proprietary seedling selection of *Chrysanthemum × morifolium* identified as code number 8556, not patented.

Propagation:

Type.—Terminal tip cuttings.

Time to initiate roots, summer.—About 5 days at 20° C.

Time to initiate roots, winter.—About 6 days at 18° C.

Time to produce a rooted cutting, summer.—About 10 days at 20° C.

Time to produce a rooted cutting, winter.—About 14 days at 18° C.

Root description.—Fine and freely branching; white in color.

Plant description:

Appearance.—Herbaceous decorative-type cut *Chrysanthemum*; typically grown as a spray-type; erect and strong flowering stems.

Growth rate.—Rapid; vigorous.

Flowering stem description.—Length: About 80 cm. Diameter: About 6 mm. Strength: Strong. Aspect: Erect. Color: 146C.

Foliage description.—Arrangement: Alternate. Length: About 7.5 to 10.5 cm. Width: About 5 to 8 cm. Apex: Apiculate. Base: Attenuate. Margin: Pinnately lobed; serrate. Texture, upper and lower surface: Pubescent. Petiole length: About 2 to 3 cm. Color: Developing and fully expanded foliage, upper surface: 147A. Developing and fully expanded foliage, lower surface: Closest to 147B. Venation, upper surface: 147C. Venation, lower surface: 146D. Petiole, upper and lower surfaces: 146B.

Inflorescence description:

Appearance.—Decorative-type inflorescence form with spatulate-shaped ray florets. Inflorescences borne on terminals above foliage. Disk and ray florets develop acropetally on a capitulum. Inflorescences not fragrant. Typically grown as a spray-type.

Flowering response.—Under natural conditions, plant typically flower in November 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). Plants exposed to long day/short night conditions after planting followed by photoinductive short day/long night conditions flower about 50 to 53 days later. Early and uniform flowering response.

Postproduction longevity.—Cut inflorescences will maintain good substance and form for about three weeks.

Quantity of inflorescences per flowering stem.—About 16 inflorescences per flowering stem.

Inflorescence size.—Diameter: About 6.5 cm. Depth (height): About 3 cm. Diameter of disc: About 3 mm.

Inflorescence buds.—Length: About 1 cm. Diameter: About 1.1 cm. Shape: Globular. Color: 137C.

Ray florets.—Length: About 1 to 4 cm. Corolla tube length: About 0.5 to 2 cm. Width: About 2 to 10 mm. Shape: Spatulate. Apex: Acute to rounded, emarginate. Base: Fused. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number of ray florets per inflorescence: About 170 in multiple whorls. Color: When opening, upper and lower surfaces: 151B. Fully opened, upper surface: 8A overlain with 26A. Fully opened, lower surface: 6C.

US PP16,265 P2

5

Disc florets.—Shape: Tubular. Length: About 6 mm. Width: About 1 mm. Number of disc florets per inflorescence: About five; inconspicuous. Color: Immature: 145C; towards the apex, 145A. Mature: Apex: 145A. Mid-section and base: 151B.

Peduncles.—Length, terminal peduncle: About 2 cm. Length, fourth peduncle: About 5 cm. Diameter: About 2 to 3 mm. Strength: Moderately strong. Texture: Pubescent. Color: 146B to 146C.

Reproductive organs.—Androecium: Present on disc florets only. Anther color: 12A. Pollen color: 12A. Gynoecium: Present on both ray and disc florets.

6

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

Disease/pest resistance: Plants of the new *Chrysanthemum* have been observed to be resistant to Leaf Miners. Resistance to known *Chrysanthemum* pathogens and other pests has not been observed on plants of the new *Chrysanthemum*.

It is claimed:

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

* * * * *

