



US00PP17437P2

(12) **United States Plant Patent**  
**Bergman**

(10) **Patent No.:** **US PP17,437 P2**  
(45) **Date of Patent:** **Feb. 20, 2007**

(54) **CHRYSANTHEMUM PLANT NAMED**  
**'YOGOLDEN GATE'**

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

(75) Inventor: **Wendy R. Bergman**, Lehigh Acres, FL  
(US)

(73) Assignee: **Yoder Brothers, Inc.**, Barberton, OH  
(US)

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 30 days.

(21) Appl. No.: **11/157,453**

(22) Filed: **Jun. 21, 2005**

(51) **Int. Cl.**  
**A01H 5/00** (2006.01)

(52) **U.S. Cl.** ..... **Plt./289**

(58) **Field of Classification Search** ..... Plt./289  
See application file for complete search history.

(56) **References Cited**

**PUBLICATIONS**

UPOV ROM GTITM Computer Database, GTI Jouve  
Retrieval Software 2006/05 Citation for 'Yogolden Gate'.\*

\* cited by examiner

*Primary Examiner*—Wendy Haas

(74) *Attorney, Agent, or Firm*—C. A. Whealy

(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named  
'Yogolden Gate', characterized by its uniform and upright  
plant habit; strong growth habit; large dark green-colored  
foliage; uniform flowering response and habit; best grown  
unpinched and as a disbud-type; early flowering habit;  
decorative incurve-type inflorescences; bright yellow-  
colored ray florets; and excellent postproduction longevity  
with plants maintaining good substance and color for about  
four weeks in an interior environment.

**2 Drawing Sheets**

**1**

Botanical designation: *Chrysanthemum*×*morifolium*.  
Cultivar denomination: 'Yogolden Gate'.

**BACKGROUND OF THE INVENTION**

The present Invention relates to a new and distinct culti-  
var of *Chrysanthemum* plant, botanically known as  
*Chrysanthemum*×*morifolium* and hereinafter referred to by  
the name 'Yogolden Gate'.

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 program is to  
create or discover new potted *Chrysanthemum* cultivars that  
are suitable for year-round production with uniform plant  
growth habit, good vigor and strong branching habit, numer-  
ous inflorescences, desirable inflorescence form and floret  
colors, fast and uniform flowering response, and good  
postproduction longevity.

The new *Chrysanthemum* originated from a cross-  
pollination made in November, 1999 in Salinas, Calif., of a  
proprietary selection of *Chrysanthemum*×*morifolium* iden-  
tified as code number YB-4976, not patented, as the female,  
or seed, parent with a proprietary selection of  
*Chrysanthemum*×*morifolium* identified as code number  
YB-4691, not patented, as the male, or pollen, parent. The  
new *Chrysanthemum* was discovered and selected by the  
Inventor as a single flowering plant within the progeny of the  
stated cross-pollination grown in a controlled environment  
in Alva, Fla. in November, 2000. The selection of this plant  
was based on its uniform plant growth habit, good vigor and  
strong branching habit, desirable inflorescence form and  
floret colors, fast and uniform flowering response, and good  
postproduction longevity.

Asexual reproduction of the new *Chrysanthemum* by  
vegetative tip cuttings was first conducted in Alva, Fla. in

**2**

March, 2001. Asexual reproduction by cuttings has shown  
that the unique features of this new *Chrysanthemum* are  
stable and reproduced true to type in successive generations.

**SUMMARY OF THE INVENTION**

The cultivar Yogolden Gate has not been observed under  
all possible environmental conditions. The phenotype may  
vary somewhat with variations in environment such as  
temperature, daylength, and/or light level, without, however,  
any variance in genotype.

The following traits have been repeatedly observed and  
are determined to be the unique characteristics of 'Yogolden  
Gate'. These characteristics in combination distinguish  
'Yogolden Gate' as a new and distinct *Chrysanthemum*:

1. Uniform and upright spreading plant habit.
2. Strong growth habit.
3. Large, dark green-colored foliage.
4. Uniform flowering response and habit.
5. Best grown unpinched and as a disbud-type.
6. Early flowering, eight week response time.
7. Large decorative incurve-type inflorescences.
8. Bright yellow-colored ray florets.
9. Excellent postproduction longevity with plants main-  
taining good substance and color for about four weeks  
in an interior environment.

Plants of the new *Chrysanthemum* can be compared to  
plants of the female parent selection. Plants of the new  
*Chrysanthemum* differ from plants of the female parent  
selection primarily in ray floret coloration as plants of the  
female parent selection have white-colored ray florets. In  
addition, plants of the new *Chrysanthemum* differ from  
plants of the female parent selection in floret formation as  
plants of the female parent selection have disc florets.



Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. Plants of the new *Chrysanthemum* differ from plants of the male parent selection primarily in ray floret coloration as plants of the male parent selection have lighter yellow-colored ray florets. In addition, plants of the new *Chrysanthemum* differ from plants of the male parent selection in floret formation as plants of the male parent selection have disc florets.

Plants of the new *Chrysanthemum* can be compared to plants of the cultivar Lemon Cymbal, not patented. In side-by-side comparisons conducted in Alva, Fla., plants of the new *Chrysanthemum* differed from plants of the cultivar Lemon Cymbal in the following characteristics:

1. Plants of the new *Chrysanthemum* were more vigorous and stronger than plants of the cultivar Lemon Cymbal.
2. Plants of the new *Chrysanthemum* flowered about one week earlier than plants of the cultivar Lemon Cymbal.
3. Plants of the new *Chrysanthemum* had darker yellow-colored ray florets than plants of the cultivar Lemon Cymbal.

#### 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 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 typical flowering plants of 'Yogolden Gate' grown as disbud-types.

The photograph on the second sheet comprises a close-up view of a typical inflorescence of 'Yogolden Gate' grown as a disbud-type.

#### 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, following observations and measurements describe plants grown and flowered during the spring in Salinas, Calif., in a fiberglass-covered greenhouse and under conditions which approximate those generally used in commercial potted *Chrysanthemum* production. During the production of these plants, the following conditions were measured: day temperatures, 21° C. to 27° C.; night temperatures, 17° C. to 19° C.; and light levels, 5,000 to 6,000 foot-candles. Four unrooted cuttings were directly stuck in 15-cm containers and exposed to long day/short night conditions. About two weeks later, the photoinductive short day/long night treatments were initiated. Plants used for the description were grown as disbud-types. Measurements and numerical values represent averages of typical flowering plants.

Botanical classification: *Chrysanthemum*×*morifolium* cultivar Yogolden Gate.

Commercial classification: Decorative incurve-type potted *Chrysanthemum*.

Parentage:

*Female, or seed, parent.*—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number YB-4976, not patented.

*Male, or pollen, parent.*—Proprietary selection of *Chrysanthemum*×*morifolium* identified as code number YB-4691, not patented.

Propagation:

*Type.*—Terminal tip cuttings.

*Time to initiate roots.*—About four days at 21° C.

*Time to produce a rooted cutting.*—About ten days at 21° C.

*Root description.*—Fibrous; white, close to 155D, in color.

*Rooting habit.*—Freely branching; moderately dense.

Plant description:

*Appearance.*—Herbaceous decorative incurve-type potted *Chrysanthemum* that is best grown unpinched and as a disbud-type. Upright and uniformly mounded crown; strong growth habit.

*Plant height.*—About 31.5 cm.

*Plant width.*—About 34 cm.

*Peduncles.*—Length: About 27.5 cm. Diameter: About 4 mm. Internode length: About 1.4 cm. Strength: Strong. Texture: Pubescent. Color: Close to 146A.

*Foliage description.*—Arrangement: Alternate; simple. Length: Large, about 11.5 cm. Width: About 9.2 cm. Apex: Mucronate. Base: Truncate. Margin: Palmately lobed, sinuses between lateral lobes parallel to convergent. Texture, upper and lower surfaces: Pubescent. Color: Developing and fully expanded foliage, upper surface: Darker green than 147A. Developing and fully expanded foliage, lower surface: Close to 147B. Venation, upper surface: Close to 147A. Venation, lower surface: 146A to 147B. Petiole length: About 3.4 cm. Petiole diameter: About 3.5 mm. Petiole texture, upper and lower surfaces: Pubescent. Petiole color, upper surface: Close to 146A. Petiole color, lower surface: Close to 146A to 146B.

Inflorescence description:

*Appearance.*—Decorative incurve-type inflorescence form. Inflorescences borne on terminals above foliage. Disk and ray florets develop acropetally on a capitulum. Inflorescences not fragrant.

*Flowering response.*—Under natural conditions, plants 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 and early flowering habit; plants exposed to two weeks of long day/short night conditions followed by photoinductive short day/long night conditions flower about eight weeks later.

*Postproduction longevity.*—Inflorescences maintain good color and substance for about four weeks in an interior environment.

*Quantity of inflorescences.*—Grown as a disbud-type, only one inflorescence is allowed to develop per lateral branch.

*Inflorescence bud.*—Height: About 7 mm. Diameter: About 8.5 mm. Shape: Oblate. Color: Close to 146A.

*Inflorescence diameter.*—Large, about 12.7 cm.

*Inflorescence height.*—About 5.1 cm.

*Diameter of disc.*—No disc florets observed.

*Receptacle diameter.*—About 1.3 cm.

*Receptacle height.*—About 9 mm.

*Ray florets.*—Length: About 6.4 cm. Length, corolla tube: About 1.2 cm to 4.6 cm. Width, apex: About 1.3 cm. Width, corolla tube: About 4 mm. Shape: Elong-

## 5

gated oblong to quilled. Apex: Acute or emarginate. Base: Fused into a corolla tube. Margin: Entire. Orientation: Incurved. Texture, upper and lower surfaces: Smooth, glabrous; satiny. Number of ray florets per inflorescence: About 325 arranged in numerous whorls. Color: When opening, upper surface: Close to 6A. When opening, lower surface: Close to 6A to 6C. Fully opened, upper surface: Close to 6A to 5A. Fully opened, lower surface: Close to 5C.

*Phyllaries*.—Quantity per inflorescence: About 32 arranged in about three whorls. Length: About 1 cm. Width: About 5 mm. Shape: Lanceolate. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper surface: Waxy, smooth. Texture, lower surface: Pubescent. Color, upper and lower surfaces: Close to 146A.

## 6

*Reproductive organs*.—Androecium: Not observed on ray florets. Gynoecium: Present on ray florets. Style length: About 7.5 mm. Style color: Close to 144C. Stigma color: Close to 9A.

*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 greenhouse conditions.

It is claimed:

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

\* \* \* \* \*







