

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

(10) **Patent No.:** **US PP21,899 P2**  
(45) **Date of Patent:** **May 3, 2011**

(54) **CHRYSANTHEMUM PLANT NAMED**  
**‘GIRONA ORANGE’**

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

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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.

(21) Appl. No.: **12/653,953**

(22) Filed: **Dec. 18, 2009**

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

(52) **U.S. Cl.** ..... **Plt./290**

(58) **Field of Classification Search** ..... **Plt./290**  
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named  
‘Girona Orange’, characterized by its compact, upright, out-  
wardly spreading and rounded plant habit; freely branching  
habit; dense and full plant habit; uniform, freely and early  
flowering habit; and decorative-type inflorescences with  
orange-colored ray florets.

**1 Drawing Sheet**

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Botanical designation: *Chrysanthemum*×*morifolium*.  
Cultivar denomination: ‘GIRONA ORANGE’.

**BACKGROUND OF THE INVENTION**

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

The new *Chrysanthemum* is a naturally-occurring whole  
plant mutation of *Chrysanthemum*×*morifolium* ‘PPP GIRO  
09’, disclosed in U.S. Plant patent application Ser. No.  
12/462,274. The new *Chrysanthemum* plant was discovered  
and selected by the Inventor as a flowering plant from within  
a population of plants of ‘PPP GIRO 09’ in a controlled  
greenhouse environment in Oostnieuwkerke, Belgium in  
August, 2004.

Asexual reproduction of the new *Chrysanthemum* plant by  
vegetative cuttings was first conducted in a controlled green-  
house environment in Oostnieuwkerke, Belgium in January,  
2005. Asexual reproduction by cuttings 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 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 ‘Girona  
Orange’. These characteristics in combination distinguish  
‘Girona Orange’ as a new and distinct *Chrysanthemum* cul-  
tivar:

1. Compact, upright, outwardly spreading and rounded  
plant habit.
2. Freely branching habit; dense and full plant habit.
3. Uniform, freely and early flowering habit.

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4. Decorative-type inflorescences with orange-colored ray  
florets.

Plants of the new *Chrysanthemum* differ primarily from the  
parent, ‘PPP GIRO 09’, in ray floret color as plants of ‘PPP  
GIRO 09’ have purple-colored ray florets.

Plants of the new *Chrysanthemum* can be compared to  
plants of *Chrysanthemum*×*morifolium* ‘Denise’, disclosed in  
U.S. Plant Pat. No. 8,178. In side-by-side comparisons con-  
ducted in Oostnieuwkerke, Belgium, plants of the new *Chry-*  
*santhemum* differed from plants of ‘Denise’ in the following  
characteristics:

1. Plants of the new *Chrysanthemum* were more compact  
than plants of ‘Denise’.
2. Stems of plants of the new *Chrysanthemum* were more  
flexible than and not as brittle as stems of plants of  
‘Denise’.
3. Plants of the new *Chrysanthemum* had smaller inflores-  
cences than plants of ‘Denise’.
4. Ray floret color of plants of the new *Chrysanthemum*  
was lighter in color than ray floret color of plants of  
‘Denise’.

**BRIEF DESCRIPTION OF THE PHOTOGRAPH**

The accompanying photograph illustrates the overall  
appearance of the new *Chrysanthemum* plant. This photo-  
graph shows the colors as true as it is reasonably possible to  
obtain in colored reproductions of this type. Colors in the  
photograph 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  
comprises a side perspective view of a typical flowering plant  
of ‘Girona Orange’ grown in a container.

**DETAILED BOTANICAL DESCRIPTION**

The aforementioned photograph and following observa-  
tions and measurements describe plants grown in 19-cm con-  
tainers in an outdoor nursery in Oostnieuwkerke, Belgium  
during the summer and autumn under conditions and prac-  
tices which approximate those generally used in commercial



production. During the production of the plants, day temperatures ranged from 25° C. to 30° C. and night temperatures ranged from 15° C. to 20° C. Plants were 15 weeks old when the photograph and description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2005 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum*×*morifolium* ‘Girona Orange’.

Parentage: Naturally-occurring whole plant mutation of *Chrysanthemum*×*morifolium* ‘PPP GIRO 09’, disclosed in U.S. Plant patent application Ser. No. 12/462,274.

#### Propagation:

*Type*.—Terminal vegetative cuttings.

*Time to initiate roots, summer*.—About 14 days at temperatures of about 20° C.

*Time to initiate roots, winter*.—About 20 days at temperatures of about 20° C.

*Time to produce a rooted young plant, summer*.—About 30 days at temperatures of about 20° C.

*Time to produce a rooted young plant, winter*.—About 40 days at temperatures of about 20° C.

*Root description*.—Fine, fibrous; light brown in color.

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

#### Plant description:

*Appearance*.—Perennial decorative-type *Chrysanthemum*; compact plant habit with stems upright and outwardly spreading giving a uniformly rounded appearance to the plant; very freely branching habit, about 25 primary lateral branches develop, each primary lateral branch with multiple secondary branches; pinching enhances lateral branch development; dense and full plant habit; strong and moderately vigorous growth habit.

*Plant height*.—About 27 cm.

*Plant width*.—About 40 cm.

*Lateral branches*.—Length: About 25 cm. Diameter: About 2 mm to 3 mm. Internode length: About 2 cm. Strength: Strong. Texture: Pubescent; longitudinally ridged. Color: Close to 144A.

*Leaves*.—Arrangement: Alternate, simple. Length: About 2.5 cm to 4.5 cm. Width: About 1.5 cm to 2.5 cm. Apex: Rounded to cuspidate. Base: Attenuate. Margin: Palmately lobed and serrate, sinuses between lateral lobes divergent to parallel. Texture, upper and lower surfaces: Slightly pubescent. Color: Developing leaves, upper surface: Close to 137C. Developing leaves, lower surface: Close to 137D. Fully expanded leaves, upper surface: Close to N137C; venation, close to 148C. Fully expanded leaves, lower surface: Close to 147B; venation, close to 147B to 147C. Petiole: Length: About 1 cm. Diameter: About 2 mm. Texture, upper and lower surfaces: Slightly pubescent and rough. Color, upper surface: Close to 146C. Color, lower surface: Close to 146D.

#### Inflorescence description:

*Appearance*.—Decorative-type inflorescence form; inflorescences borne on terminals above foliage; disc and ray florets arranged acropetally on a capitulum.

*Fragrance*.—Faintly fragrant, pungent.

*Flowering response*.—Under natural season conditions, plants flower mid-August in Belgium.

*Postproduction longevity*.—Inflorescences maintain good color and substance for about 35 days in an outdoor nursery; inflorescences persistent.

*Quantity of inflorescences*.—About 20 inflorescences develop per lateral branch.

*Inflorescence bud*.—Height: About 4 mm. Diameter: About 7 mm. Shape: Globular. Color: Between 144A and 137C.

*Inflorescence size*.—Diameter: About 4.5 cm. Depth (height): About 3 cm. Disc diameter: About 4 mm. Receptacle diameter: About 3 mm. Receptacle height: About 2.5 mm to 3 mm. Receptacle color: Close to 144B.

*Ray florets*.—Length: About 1.5 cm to 2 cm. Width: About 5 mm. Shape: Oval. Apex: Rounded. Base: Attenuate. Margin: Entire. Aspect: Mostly flat. Texture, upper and lower surfaces: Smooth, glabrous. Number of ray florets per inflorescence: About 150 to 175 arranged in about eight whorls. Color: When opening, upper surface: Close to 171B. When opening, lower surface: Close to 34D. Fully opened, upper surface: Close to 169C; color becoming closer to 22A with development. Fully opened, lower surface: Close to 22A; color becoming closer to 20B with development.

*Disc florets*.—Length: About 3 mm. Diameter: About 0.5 mm to 1 mm. Shape: Tubular, elongated; apices acute. Number of disc florets per inflorescence: About 50 to 75. Color: Apex: Close to 144C. Mid-section: Close to 5B. Base: Close to 145D.

*Phyllaries*.—Number of phyllaries per inflorescence: About 25 arranged in two or three whorls. Length: About 4 mm to 6 mm. Width: About 2 mm to 3 mm. Shape: Ovate. Apex: Rounded. Base: Rounded to truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper surface: Close to 137A. Color, lower surface: Close to N137B.

*Peduncles*.—Length, terminal peduncle: About 4 cm. Length, fourth peduncle: About 6 cm. Length, seventh peduncle: About 8 cm. Diameter: About 2 mm. Angle: About 30° from vertical. Strength: Moderately strong. Texture: Slightly pubescent. Color: Close to 146B.

*Reproductive organs*.—Androecium: Not observed. Gynoecium: Not observed.

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

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

Garden performance: Plants of the new *Chrysanthemum* have demonstrated excellent garden performance and will tolerate temperatures ranging from about 0° C. to about 45° C. It is claimed:

1. A new and distinct *Chrysanthemum* plant named ‘Girona Orange’ as illustrated and described.

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