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(12) **United States Plant Patent**
Blom(10) **Patent No.:** US PP20,462 P3
(45) **Date of Patent:** Nov. 10, 2009(54) **CHrysanthemum PLANT NAMED
'ZANMUGOLDRU'**(50) Latin Name: *Chrysanthemum×morifolium*
Varietal Denomination: Zanmugoldru(75) Inventor: **Wilhelmus Bernardus Blom**, GA
Leimuiden (NL)(73) Assignee: **Chrysanthemum Breeders Association
Research B.V.**, Valkenburg (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.: **12/003,568**(22) Filed: **Dec. 28, 2007**(65) **Prior Publication Data**

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(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.*Primary Examiner*—David H Kruse*Assistant Examiner*—June Hwu(74) *Attorney, Agent, or Firm*—Steptoe & Johnson LLP(57) **ABSTRACT**

A *chrysanthemum* plant named 'Zanmugoldru' characterized by its small sized blooms with yellow ray florets and prolific branching; natural season flower date October 8 (week 41); blooming for a period of 5 weeks.

3 Drawing Sheets**1**Botanical designation: *Chrysanthemum×morifolium*
Ramat.

Cultivar denomination: 'Zanmugoldru'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *chrysanthemum* plant, botanically known as *Chrysanthemum×morifolium* Ramat., commercially grown as a garden mum, and herein after referred to by the cultivar denomination 'Zanmugoldru'. 'Zanmugoldru' is a product of a breeding and selection program for outdoor pot mums (garden mums) which had the objective of creating new *chrysanthemum* cultivars with a double type flower, a natural season flower date around October 8 (week 41); blooming for a period of 5 weeks. 'Zanmugoldru' is a seedling resulting from a crossing of the seed parent id 995 and the pollen parent id 710. Plants of the new cultivar 'Zanmugoldru' differ from plants of the parents mainly in natural-season flowering (1) and flower color (2). (1) The plants of the seed parent flower in early season, while those of 'Zanmugoldru' in late season. (2) The flowers of the pollen parent are more pale yellow than those of 'Zanmugoldru'.

The new and distinct cultivar was discovered and selected as a flowering plant by Wilhelmus Bernardus Blom on a cultivated field in Rijenhout, The Netherlands in 2005. The first act of asexual production of 'Zanmugoldru' was accomplished when vegetative cuttings from the initial selection in 2005 were propagated further in a controlled environment in Rijenhout, The Netherlands. The new cultivar has been found to retain its distinctive characteristics through successive propagations.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of *chrysanthemum* is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

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FIG. 1 shows a plant of the cultivar in full bloom.

FIG. 2 shows the various stages of bloom of the new cultivar.

5 FIG. 3 shows the various stages of foliage of the new cultivar.

DESCRIPTION OF THE INVENTION

10 The observations and measurements were gathered from plants grown out door in DeMotte, Ind., USA, under natural day length and temperature and planted in week 25 in 2007. The natural blooming date of this crop was October 8 (week 41). The average height of the plants was 30 cm. No growth retardants were used. No tests were done on disease or insect resistance or susceptibility. No tests were done on cold or drought tolerance. This new variety produces small sized blooms with yellow ray florets blooming for a period of 5 weeks.

15 From the cultivars known to inventor the most similar existing cultivar in comparison to 'Zanmugoldru' is 'Castor' (U.S. Plant Pat. No. 14,612). When 'Castor' and 'Zanmugoldru' are being compared the following difference is noticed:
20 The difference of 'Castor' and 'Zanmugoldru' are (1) Flower size. And (2) Color flower center (1) The flowers of 'Castor' are larger in size than those of 'Zanmugoldru' (2) The flower center of 'Zanmugoldru' are more orange colored than those of 'Castor'.

25 30 The following is a description of the plant and characteristics that distinguish 'Zanmugoldru' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, edition 2001.

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TABLE 1

Botanical description of <i>chrysanthemum</i> plant named 'Zanmugoldru'	
<u>Bud</u>	
Size	Small; cross-section 0.1 cm, height 0.5 cm
Outside Color	Greyed-green 191A
Phyllaries	3 rows
Phyllaries among disc-florets	Not present
<u>Bloom</u>	
Type	Double
Height	1.4-1.7 cm
Size	3.7-4 cm
Phyllary number	20-24
Phyllary color (upper surface)	Green 138A
Phyllary length and width	Length 8 mm, width 3 mm
Peduncle length	9 cm
Peduncle color	Greyed green 191B
Number of blooms per branch	Approx. 7 blooms per branch
Duration of flowering	5 weeks
Seeds	None observed
Fragrance	Typical <i>chrysanthemum</i> , slightly
<u>Color</u>	
Center of the flower	Immature stage: Yellow-orange 15A Mature stage: Yellow-orange 15A
Color of upper surface of the ray-florets	Yellow 9A
Color of the lower surface of the ray-florets	Yellow 9A
Tonality from Distance	A garden mum with yellow flowers
Color of the ray-florets after aging of the plant	Yellow 9C
Ray florets	
Texture	Upper and under side smooth
Number	240-250
Cross-section	Flat
Longitudinal axis of majority	Straight
Length of corolla tube	0.2-0.5 cm
Ray-floret margin	Entire
Ray-floret length	1.3-1.7 cm
Ray-floret width	0.4-0.5 cm
Ratio length/width	Medium
Shape of tip	Emarginate
Disc florets	Absent
Receptacle shape	Conical raised
<u>Reproductive Organs</u>	
Stamen	Absent
Pistil	One per ray-floret
Styles	Thin
Style color	Yellow-green 154C
Style Length	0.3 cm
Stigma color	Yellow 3A
Stigma Width	5 mm
Ovaries	Enclosed in calyx

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TABLE 1-continued

Botanical description of <i>chrysanthemum</i> plant named 'Zanmugoldru'	
<u>Plant</u>	
Form	Grown as a spray type potmum, outdoor mounded and round
Growth habit	Raised mound
Growth rate	Medium to high
10 Height	30 cm
Width	50-55 cm
Stem Color	Greyed-brown 199A
Stem Strength	Strong
Stem Brittleness	Not brittle
Stem Anthocyanin Coloration	Not observed
15 Internode length	1-5 cm
Length of lateral branch	From top to bottom 24-26 cm
Lateral branch color	Green 137C
Lateral branch, attachment	Strong
Branching (average number of lateral branches)	Prolific with 14-16 breaks after pinching
20 Natural season blooming date	October 8 (week 41)
<u>Foliage</u>	
Leaf color	Upper side: Green 147A Lower side: Green 147C
Color midvein	Upper side: Green 137B Lower side: Green 137B
25 Size	Small.; length 4-9 cm, width 2-4.5 cm
Quantity (number per lateral branch)	18-20
Shape	Elliptic
Texture upper side	Sparsely pubescent
30 Texture under side	Pubescent
Venation arrangement	Pinnate to palmate
Shape of the margin	Lobed
Shape of Base of Sinus Between Lateral Lobes	Rounded
Margin of Sinus Between Lateral Lobes	Diverging
35 Shape of Base	Cuneate to obtuse
Apex	Mucronate
Petiole length	1-2 cm
Petiole color	Green 138A
<u>40</u>	

TABLE 2

Differences with the comparison variety		
	"Zanmugoldru"	'Castor'
45 Flower size	3.7-4 cm	6.0-7.0 cm
Colour of flower center in mature stage	Yellow-orange 15A	Yellow 13B

50 I claim:

1. A new and distinct variety of *chrysanthemum* plant 'Zanmugoldru' as described and illustrated.

* * * * *

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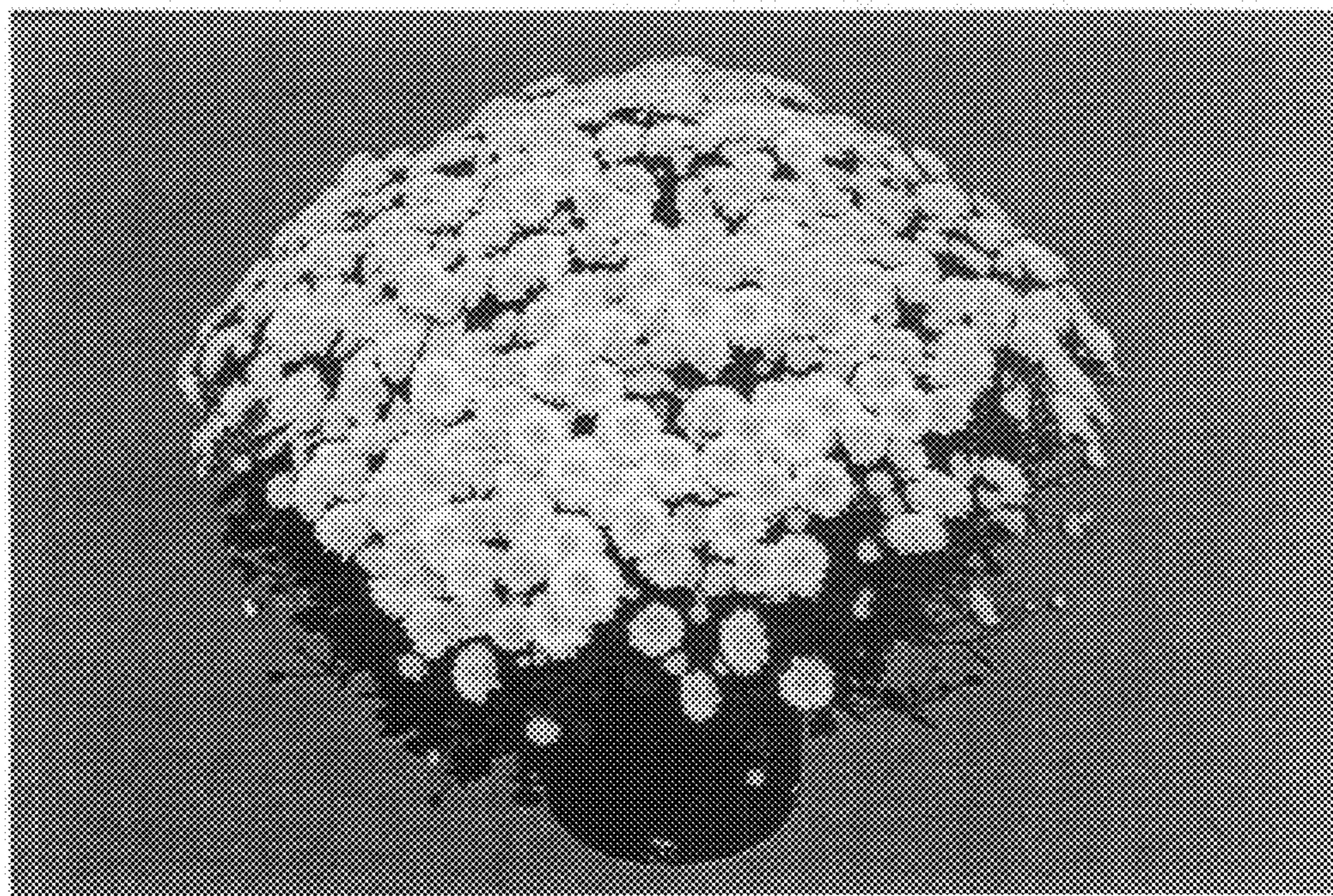


FIG. 1

FIG. 2

