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(12) **United States Plant Patent**  
**Blom**(10) **Patent No.:** US PP24,618 P2  
(45) **Date of Patent:** Jul. 8, 2014

- (54) **CHRYSANTHEMUM PLANT NAMED 'ZANMUDOVE'**
- (50) Latin Name: *Chrysanthemum×morifolium* Ramat.  
Varietal Denomination: Zanmudove
- (71) Applicant: **Chrysanthemum Breeders Association Research B.V.**, Aalsmeer (NL)
- (72) Inventor: **Wilhelmus Bernardus Blom**, 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.: **13/694,699**

- (22) Filed: **Dec. 26, 2012**
- (51) **Int. Cl.**  
*A01H 5/00* (2006.01)
- (52) **U.S. Cl.**  
USPC ..... **Plt./288**
- (58) **Field of Classification Search**  
None  
See application file for complete search history.

*Primary Examiner* — Anne Grunberg(74) *Attorney, Agent, or Firm* — Steptoe & Johnson LLP**ABSTRACT**

A *Chrysanthemum* plant named 'Zanmudove' characterized by its large sized blooms with white ray florets and a cream center and prolific branching; natural season flowering date September 24 (week 39); blooming for a period of 5 weeks.

**3 Drawing Sheets****1**

Botanical designation: *Chrysanthemum×morifolium* Ramat.

Cultivar denomination: 'Zanmudove'.

**BACKGROUND OF THE INVENTION**

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The present invention relates to a new and distinct cultivar of *Chrysanthemum* plant, botanically known as *Chrysanthemum×morifolium* Ramat., commercially known as a garden mum, and hereinafter referred to by the cultivar denomination 'Zanmudove'. 'Zanmudove' is a product of a breeding and selection program for outdoor pot mums (garden mums) which had the objective of creating new cultivars with a double type inflorescence, a natural season flowering date around September 24 (week 39), blooming for a period of 5 weeks. 'Zanmudove' is a seedling resulting from a cross of the female parent id 24633 with the male parent id 2820. Plants of the new cultivar 'Zanmudove' differ from plants of the parents in the natural season flowering date; plants of the seedling flower in an earlier period than those of the parents.

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 2007. The first act of asexual production of 'Zanmudove' was accomplished when vegetative cuttings from the initial selection in 2007 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* (of about 17 weeks) is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

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

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

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

**DESCRIPTION OF THE INVENTION**

The observations and measurements were gathered from plants grown out door in Rijenhout, The Netherlands under natural day length and temperature and planted in week 23 in 10 2012. The natural blooming date of this crop was September 24 (week 39). 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 15 or drought tolerance. This new variety produces large sized blooms with white ray florets and a cream center blooming for a period of 5 weeks.

From the cultivars known to inventor the most similar 20 existing cultivar in comparison to 'Zanmudove' are 'Zanmustawhi' (U.S. Plant patent application Ser. No. 13/694,963) and 'Zanmuspen' (U.S. Plant Pat. No. 21,205). When 'Zanmudove', 'Zanmustawhi' and 'Zanmuspen' are being compared the following differences are noticed (1) Inflorescence size. And (2) Natural season flowering date. (1) Inflorescences of 'Zanmudove' are larger than those of 'Zanmustawhi' and 'Zanmuspen'. (2) Plants of 'Zanmudove' and 'Zanmustawhi' flower later in the season than those of 'Zanmuspen'. The following is a description of the plant and characteristics that distinguish 'Zanmudove' as a new and distinct variety.

The color designations are taken from the plant itself. 35 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 × morifolium</i> Ramat. 'Zanmudove'	
<u>Bud</u>	
Size:	Small; cross-section 6 mm, height 4 mm
Shape:	Round
Texture:	Pubescent
Outside color:	Greyed-green 191A
Phyllaries	
Number:	24-25, arranged in 3 rows
Shape:	Elliptic
Apex:	Acute
Base:	Truncate
Margin:	Entire
Color:	Upper side: Green 138A Lower side: Green 135B
Length and width:	3-4 mm; 1.5 mm
Texture:	Pubescent
Inflorescences	
Type:	Double
Height:	2 cm
Diameter:	6.5 cm
Peduncle length:	5-6 cm
Peduncle color:	Green N138B
Peduncle diameter:	1.5 mm
Peduncle texture:	Pubescent
Number per branch:	Approx. 5-6 inflorescences
Duration of flowering:	5 weeks
Seeds:	Produced in small quantities, ovate, Greyed-brown 199A, length 1.5 mm, diameter 0.5 mm
Fragrance:	Faint <i>chrysanthemum</i> odor
Color inflorescences	
Center of inflorescence:	Immature stage: White 155A; Mature stage: White 155D
Color of upper side of ray florets:	White 155D
Color of lower side of ray florets:	White 155D
Tonality from distance:	A garden mum with white blooms and a cream center
Color of ray florets after aging of the plant:	White 155D
Ray florets	
Texture:	Upper and lower side smooth
Number:	Approx. 180
Shape:	Elliptic
Apex:	Dentate
Base:	Attenuate
Cross-section:	Flat
Longitudinal axis:	Straight
Length of corolla tube:	4 mm
Ray floret margin:	Entire
Ray floret length:	1.5-2.5 cm
Ray floret width:	3-4 mm
Ratio length/width:	High
Disc florets	
Disc diameter:	2 mm
Distribution of disc florets:	Few, only visible in mature stage of inflorescence
Shape:	Funnel shaped
Color:	Yellow-green 145C at base to Green Yellow 11D at apex
Length:	4 mm
Diameter:	0.8 mm
Receptacle	
Color:	Yellow-green 145D
Shape:	Conical raised
Height:	3.5 mm
Diameter:	4 mm

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TABLE 1-continued

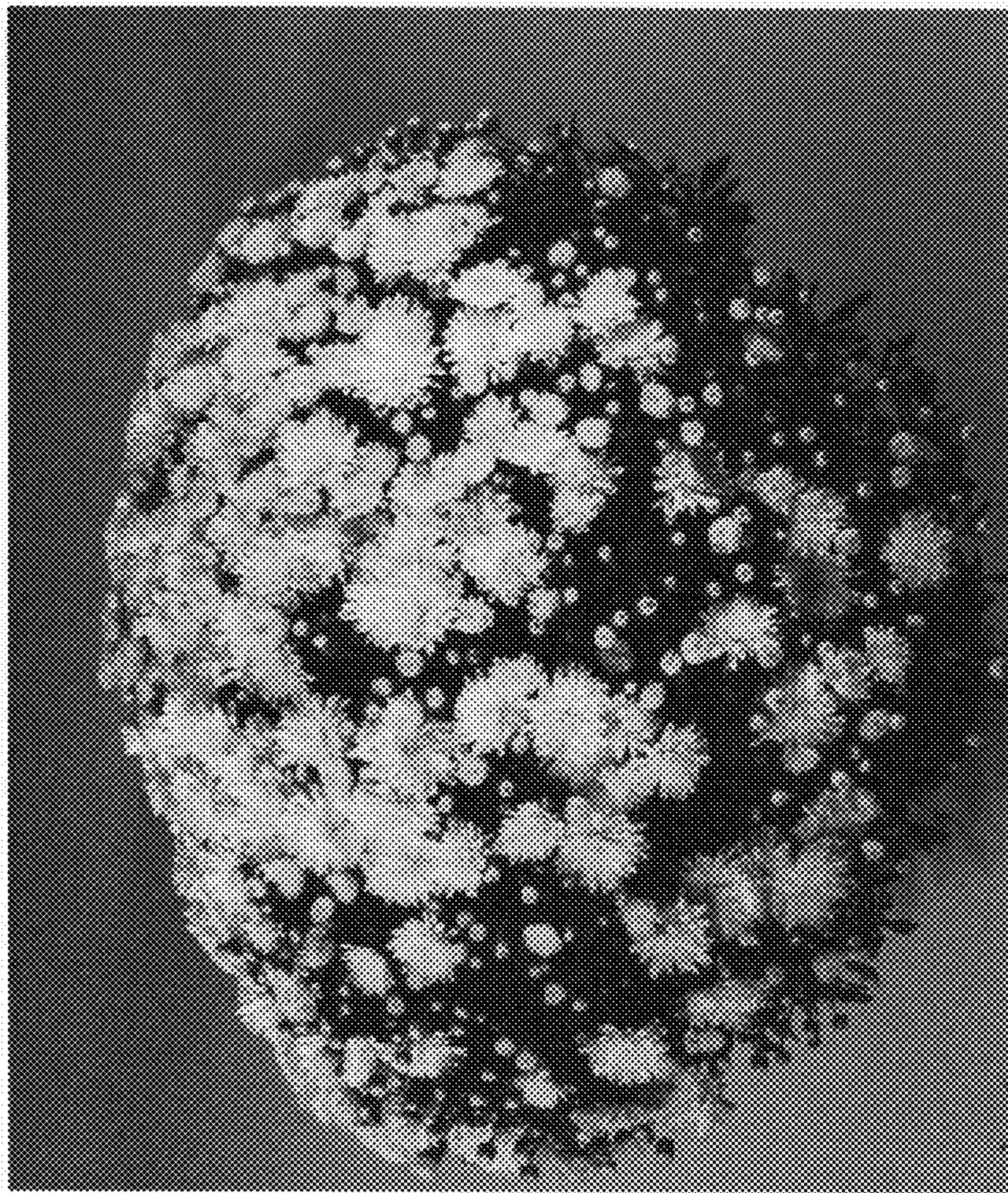
Botanical Description of <i>Chrysanthemum × morifolium</i> Ramat. 'Zanmudove'			
<u>5 Reproductive Organs</u>			
Androecium:	Present on only disc florets		
Stamen length:	3 mm		
Stamen color:	Yellow-green 144A		
Anther color:	Yellow 2A		
10 Pollen:	Produced in a moderate amount		
Pollen color:	Yellow 13A		
Gynoecium:	Present on both ray and disc florets		
Style color:	Yellow-green 154C		
Style length:	4 mm		
Stigma color:	Yellow 7A		
15 Stigma width:	1 mm		
Ovary:	Enclosed in calyx		
Plant			
Form:	Grown as a spray type pot mum, outdoor raised and mounded		
20 Growth habit:	Spherical shape		
Growth rate:	Medium		
Height:	30 cm		
Width:	45 cm		
Stem color:	Greyed-brown 199A		
Stem strength:	Strong		
25 Stem brittleness:	Not brittle		
Stem anthocyanin coloration:	Not observed		
Internode length:	2-2.5 cm		
Length of lateral branch:	From top to bottom 18-20 cm		
Lateral branch color:	Green 137 C		
30 Lateral branch, attachment:	Strong		
Lateral branch diameter:	2.5 mm		
Branching (average number of lateral branches):	Prolific with 9-11 breaks after pinching		
35 Natural season blooming date:	September 24 (week 39)		
Foliage			
Leaf color:	Upper side: Green N137B to N137A Lower side: Green N138B to N138A		
40 Color midvein:	Upper side: Yellow-green 147D Lower side: Yellow-green 148D		
Size:	Small; length 2.5-6.5 cm, width 0.8-3 cm		
Quantity (number per lateral branches):	28-30		
Shape:	Elliptic		
45 Texture upper side:	Sparsely pubescent		
Texture under side:	Pubescent		
Venation arrangement:	Palmate		
Shape of margin:	Serrated		
Shape of base of sinus between lateral lobes:	Rounded		
50 Margin of sinus between lateral lobes:	Diverging		
Shape of base:	Attenuate		
Apex:	Mucronulate		
Petiole length:	0.3-1.2 cm		
Petiole diameter:	1.5 mm		
55 Petiole color:	Yellow-green 147D		
<u>60 Differences with the comparison varieties, when grown under identical conditions</u>			
	'Zanmudove'    'Zanmustawhi'    'Zanmuspen'		
60 Inflorescence size:	6.5 cm	5 cm	6 cm
Natural season flowering date:	week 39	week 39	week 35
65			

TABLE 2

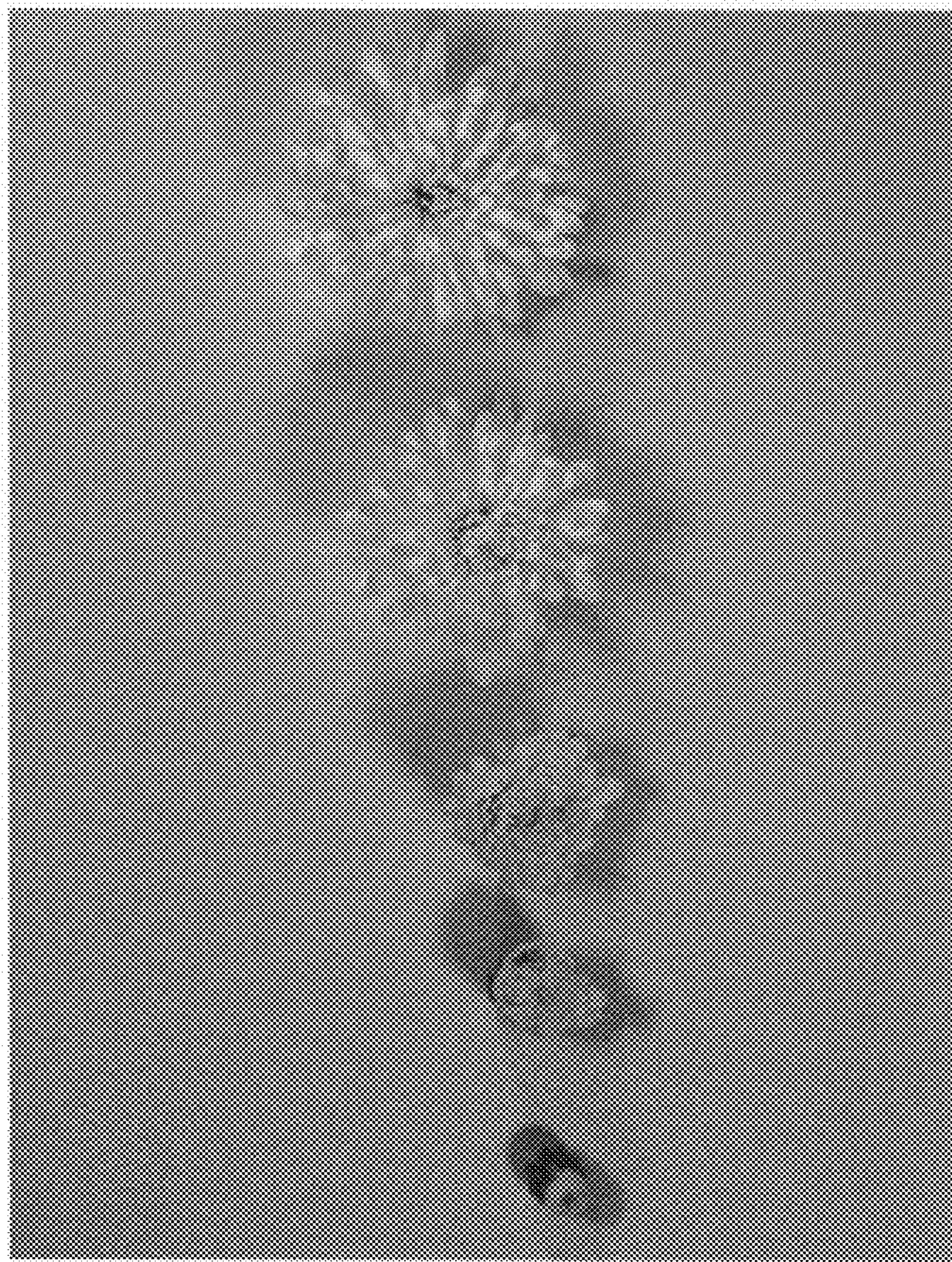
I claim:

1. A new and distinct *Chrysanthemum* plant named ‘Zan-mudove’ as described and illustrated.

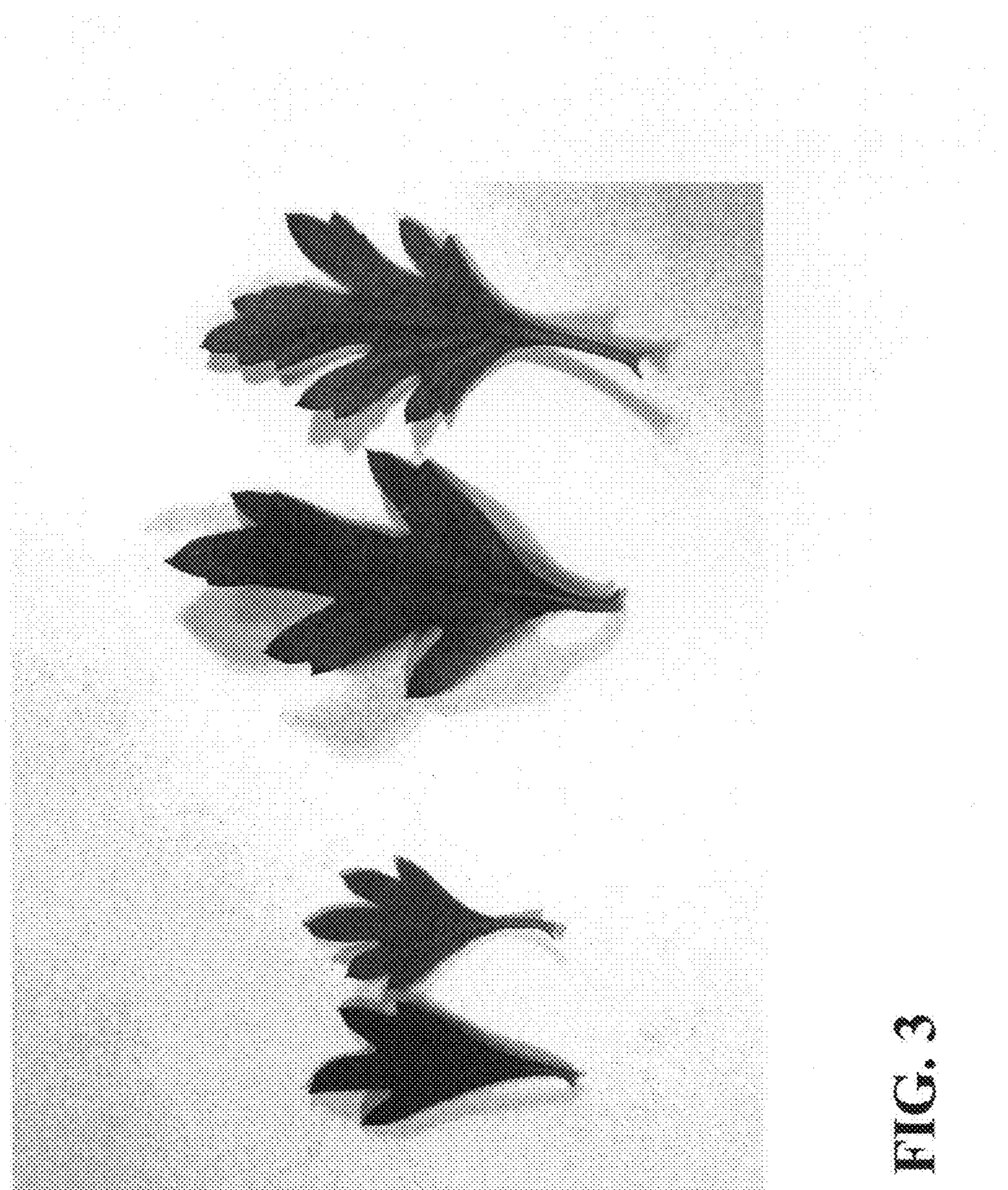
\* \* \* \* \*



**FIG. 1**



**FIG. 2**



**FIG. 3**