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# (12) United States Plant Patent

Pullen et al.

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# (54) STRAWBERRY PLANT NAMED 'DRISSTRAWTWENTYFOUR'

(50) Latin Name: *Fragaria*×*ananassa*Varietal Denomination: **DrisStrawTwentyFour** 

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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.

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(22) Filed: Oct. 4, 2011

(51) **Int. Cl.** 

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(2006.01)

(52) U.S. Cl. ..... Plt./209

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### (57) ABSTRACT

A new and distinct variety of strawberry plant named 'Dris-StrawTwentyFour' characterized by having very large sized, conical fruit with medium sweetness and high yield is disclosed.

3 Drawing Sheets

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Genus and species: *Fragaria*×*ananassa*. Variety denomination: 'DrisStrawTwentyFour'.

#### BACKGROUND OF THE NEW PLANT

The present invention relates to a new and distinct strawberry variety designated 'DrisStrawTwentyFour' and botanically known as *Fragaria×ananassa*. This new strawberry variety was discovered in Hillsborough County, Fla. in December 2007 and originated from a cross between the proprietary female parent '3M44' (unpatented) and the proprietary male parent '50L174' (unpatented). A single plant was selected for asexual propagation via tissue culture and vegetative cuttings in Shasta County, Calif. in 2007.

'DrisStrawTwentyFour' underwent further testing in Hills-borough County, Fla. for five years (2007-2011). The present invention has been found to retain its distinctive characteristics through successive asexual propagations via stolons and tissue culture.

Plant Breeder's Rights for this variety have not been applied for. 'DrisStrawTwentyFour' has not been made publicly available or sold more than one year prior to the filing date of this application.

#### SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Hillsborough County, Fla.

- 1. High yield;
- 2. Very large, conic shaped fruit; and
- 3. Medium sweetness.

### DESCRIPTION OF THE PHOTOGRAPHS

The accompanying color photographs show typical specimens of the new variety at various stages of development. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs were taken from four-month-old plants.

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FIG. 1 shows overall plant habit including fruit at various stages of development.

FIG. 2 shows upper and lower surfaces of the leaves of the plant with three leaflets.

FIG. 3 shows both upper and lower surfaces of the flowers.

FIG. 4 shows the whole fruit.

FIG. 5 shows the fruit in longitudinal cross-section.

#### DESCRIPTION OF THE NEW VARIETY

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawTwentyFour'. The data which define these characteristics is based on observations taken in Hillsborough County, Fla. from 2007 to 2011. This description is in accordance with UPOV terminology. Color designations, color descriptions, and other phenotypical descriptions may deviate from the stated values and descriptions depending upon variation in environmental, seasonal, climatic, and cultural conditions. 'DrisStrawTwentyFour' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawTwentyFour' was taken from four-month-old plants. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (2001 edition). Descriptive terminology follows the *Plant Identification Terminology*, An Illustrated Glossary,  $2^{nd}$  edition by James G. Harris and Melinda Woolf Harris, unless where otherwise defined.

# DETAILED BOTANICAL DESCRIPTION OF THE PLANT

Classification:

Species.—Fragaria×ananassa.

Common name.—Strawberry.

Denomination.—'DrisStrawTwentyFour'.

Parentage:

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Female parent.—The proprietary variety '3M44' (unpatented).

Male parent.—The proprietary variety '50L174' (unpatented).

Plant:		Size of calyx in relation to fruit: Slightly larger.
Height.—19.6 cm.		Adherence of calyx: Very strong.
Diameter.—42.5 cm.		Sepal.—Shape: Oval. Apex: Convex. Margin: Entire.
Number of crowns/plant.—3.		Length: 12.50 mm. Width: 6.40 mm. Typical and
Habit.—Flat — spreading.	5	observed sepal number per flower: 12 or 14.
Density of individual plant.—Open — sparse to		*
medium.		Receptacle color.—RHS 145A (Medium yellow-
Vigor (health and hardiness of plant).—Medium.		green).
		Stamen.—Present. Anther color: RHS 20A (Medium
Terminal leaflets:	10	yellow-orange).
Size.—Medium. Length: 9.0 cm. Width: 8.3 cm. Length/		Pedicel.—Attitude of hairs: Upwards.
width ratio: 1.1 (As long as broad).		Fruiting truss:
Number of teeth/terminal leaflet.—21.		Length.—Medium; 17.8 cm.
Shape of teeth.—Rounded — crenate.		
Color.—Upper surface: RHS 173A (Dark green).	15	Diameter at base of truss.—3.20 mm.
Lower surface: RHS 147C (Medium yellow-green).	15	Number of berries per fruiting truss.—1.
Shape in cross section.—Slightly concave.		Attitude at first picking.—Prostrate.
Blistering.—Medium.		Color at base of truss.—RHS 145A (Medium yellow-
Glossiness.—Medium.		green).
Number of leaflets.—Three only.	<b>3</b> 0	Fruit:
Shape.—Orbicular.	20	Relative fruit size.—Very large.
Base shape.—Slightly oblique.		Length.—56.95 mm.
Apex descriptor.—Rounded.		Width.—45.06 mm.
Variegation.—Absent.		Length/width ratio.—1.3 (Longer than broad).
		· •
Margin.—Crenate.  Margin profile Elet (level with the leeflet blode)	25	Fruit hollow length.—34.91 mm.
Margin profile.—Flat (level with the leaflet blade).		Fruit hollow width.—15.57 mm.
Petiole:		Fruit hollow length/width ratio.—2.2.
Length.—11.2 cm.		Fruit hollow center (cavity).—Large.
Diameter.—3.66 mm.		Weight (per individual berry).—28.4 g.
Pubescence.—Medium.	30	Predominant fruit shape.—Conical.
Pose of hairs.—Outwards-horizontal.		Difference in shape between primary and secondary
Color.—RHS N144A (Medium yellow-green).		fruits.—Slight.
Petiolule:		Evenness of fruit surface.—Even or very slightly
<i>Length.</i> —14.30 mm.		uneven.
Diameter.—1.87 mm.	35	
Bract frequency.— $0$ .		Evenness of fruit color.—Slightly uneven.
Color.—RHS N144A (Medium yellow-green).		
Stipule:		Fruit glossiness.—Strong.
<i>Length.</i> —3.9 cm.		Achenes.—Insertion of achenes: Above surface. Colora-
<i>Width.</i> —10.94 mm.	40	tion (sunward side of berry): RHS 185A (Dark
Pubescence.—Dense.		greyed-purple). Coloration (shaded side of berry):
Stipule anthocyanin coloration.—Absent or very weak;		RHS 153D (Medium yellow-green). Number per
RHS 182A (Dark greyed-green).		berry: 348. Weight (weight achenes divided by total #
Stolon:		seed): 0.0006758829. Width of band without achenes:
Number.—Medium.	45	Broad.
Average number of daughter plants per plant.—73.	10	Firmness of flesh.—Firm.
Stolon anthocyanin.—Strong; RHS 45A (Medium red).		Color of flesh (excluding core).—RHS 44A (Medium
Thickness.—Thin.		red) and RHS 155B (White).
Pubescence.—Sparse.		Color of core.—RHS 39B (Medium red).
nflorescence:	50	
Position relative to foliage.—Beneath.	50	Evenness of flesh color.—Even.
Number of flowers.—Medium.		Distribution of flesh color.—Only marginal.
Time of flowering (50% of plants at first flower).—Very		Sweetness.—Medium.
early.		Acidity.—Medium.
Flower size.—Medium.		Texture when tasted.—Coarse.
Diameter.—33.72 mm.	55	Type of bearing.—Partially everbearing — partially
Petals.—Shape: Orbicular. Apex: Rounded. Base: Con-		remontant.
1		Grams of fruit/plant.—682.0 g.
cavo-convex. Margin: Entire. Spacing: Overlapping.		Harvest interval.—Late November — late March.
Length: 14.07 mm. Width: 14.10 mm. Length/width		77 1 1
ratio: As long as broad; 1.0. Typical and observed		Disease, pest, and stress resistance:
petal number per flower: 7. Color (upper surface):		Botrytis fruit rot.—Susceptible.
RHS 155D (White).		· · ·
Calyx.—Diameter.—35.10 mm. Diameter relative to		Powdery mildew.—Susceptible.  Verticillium wilt Susceptible
corolla: Larger. Inner calyx diameter relative to outer:		Verticillium wilt.—Susceptible.
Same size. Insertion of calyx: Set above fruit —	65	Xanthomonas fragariae.—Susceptible.
raised. Pose of calyx segments: All poses are present.		High temperatures.—Moderately resistant.

High pH.—Moderately resistant.

Cool weather/freezes.—Moderately resistant.

# COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

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When 'DrisStrawTwentyFour' is compared to the proprietary female parent '3M44' (unpatented), 'DrisStrawTwentyFour' has earlier production and softer fruit than '3M44'.

When 'DrisStrawTwentyFour' is compared to the proprietary male parent '50L174' (unpatented), 'DrisStrawTwenty-Four' has much higher yields than '50L174'.

When 'DrisStrawTwentyFour' is compared to the commercial variety 'Driscoll Atlantis' (U.S. Plant Pat. No. 16,475), 'DrisStrawTwentyFour' has medium glossy leaves, a slightly oblique terminal leaflet base, and thin stolons that have strong

anthocyanin coloration and sparse pubescence, while 'Driscoll Atlantis' has weakly glossy leaves, a rounded terminal leaflet base, and medium thick stolons that have weak to medium anthocyanin coloration and medium pubescence.

5 Additionally, 'DrisStrawTwentyFour' has inflorescence positioned beneath the foliage, and fruit with a broad band without achenes and a coarse texture, while 'Driscoll Atlantis' has inflorescence positioned level to above the foliage, and fruit with a very narrow band without achenes and a medium texture when tasted.

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#### We claim:

1. A new and distinct variety of strawberry plant named 'DrisStrawTwentyFour' as described and shown herein.

\* \* \* \* \*



FIG. 1

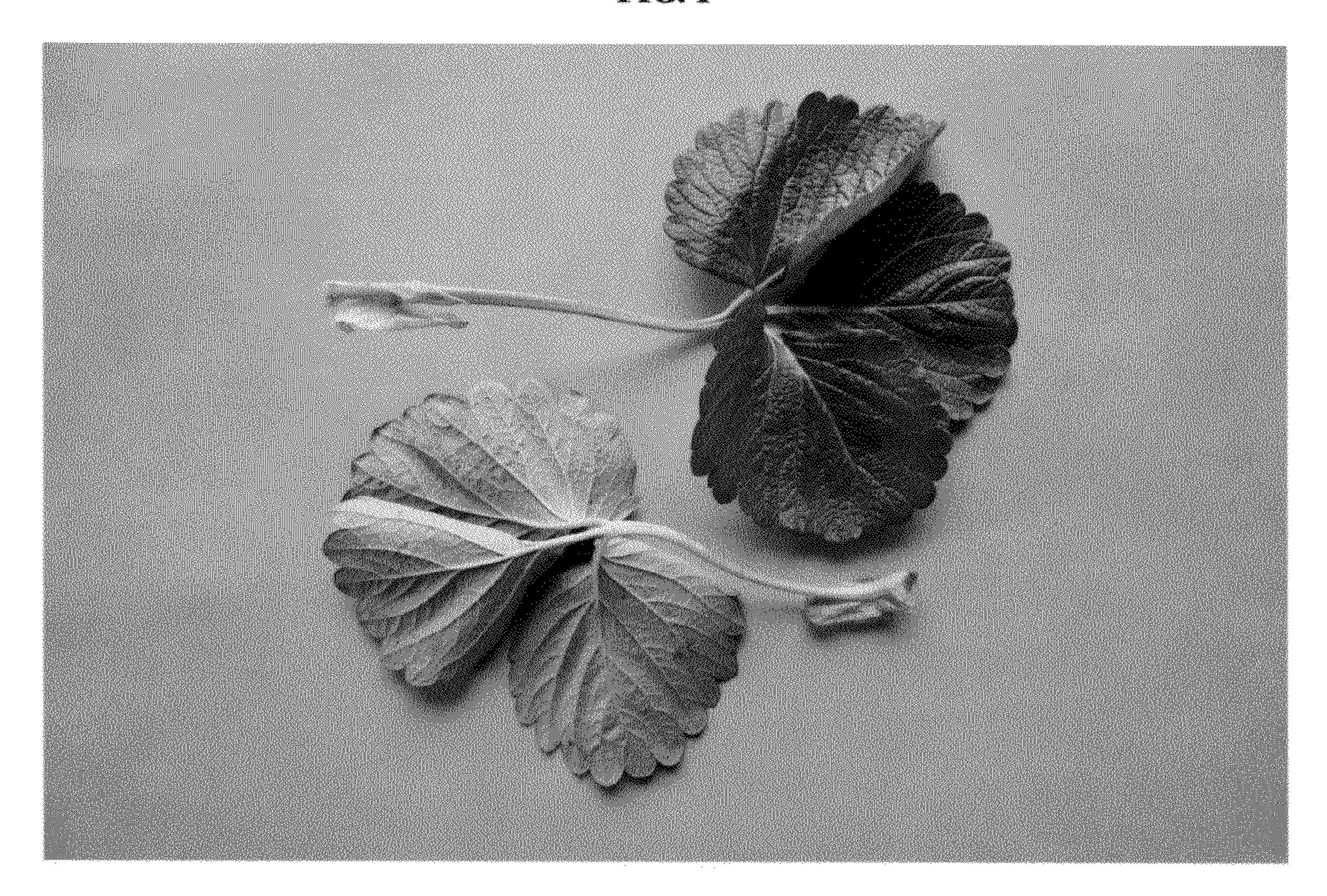


FIG. 2

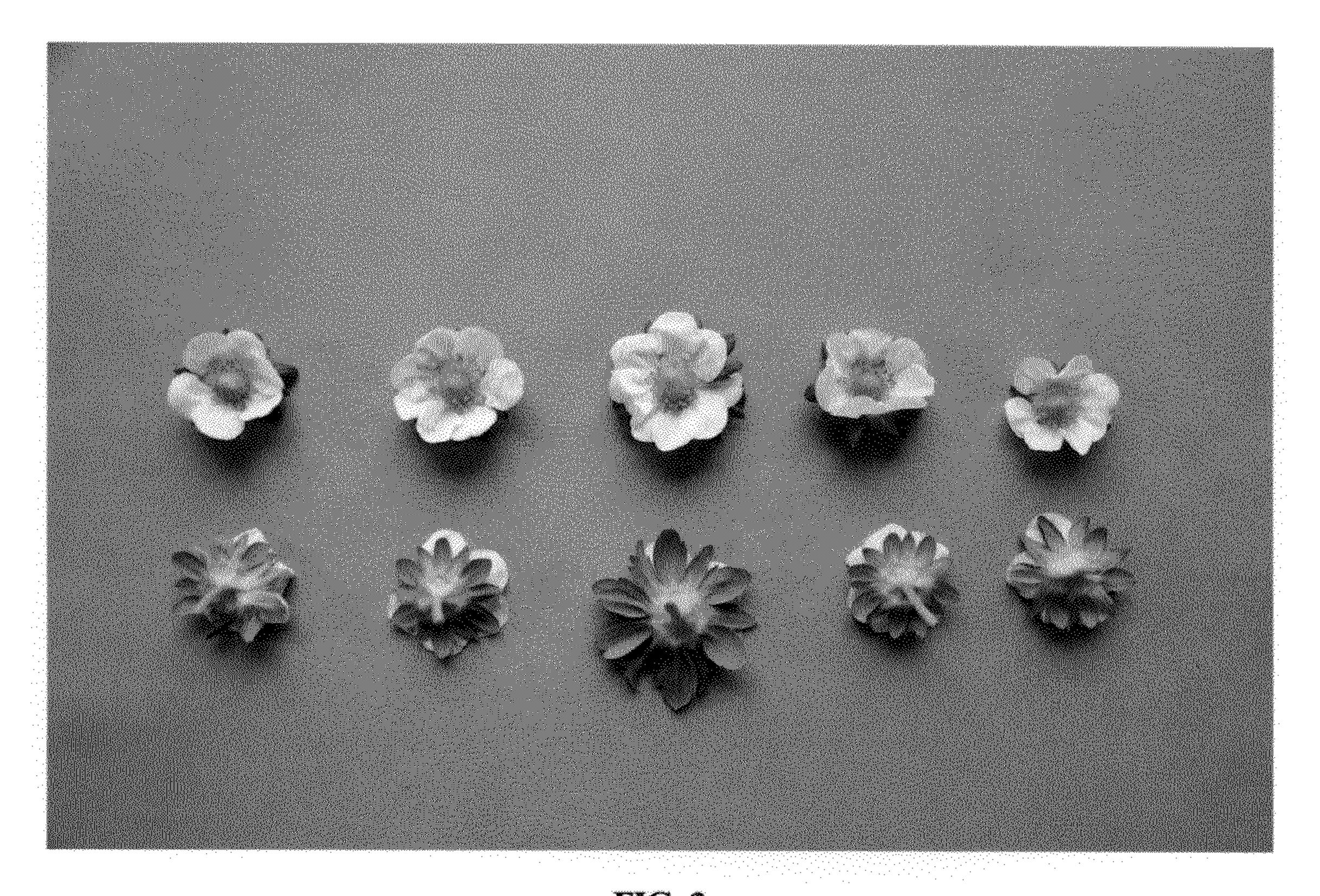


FIG. 3

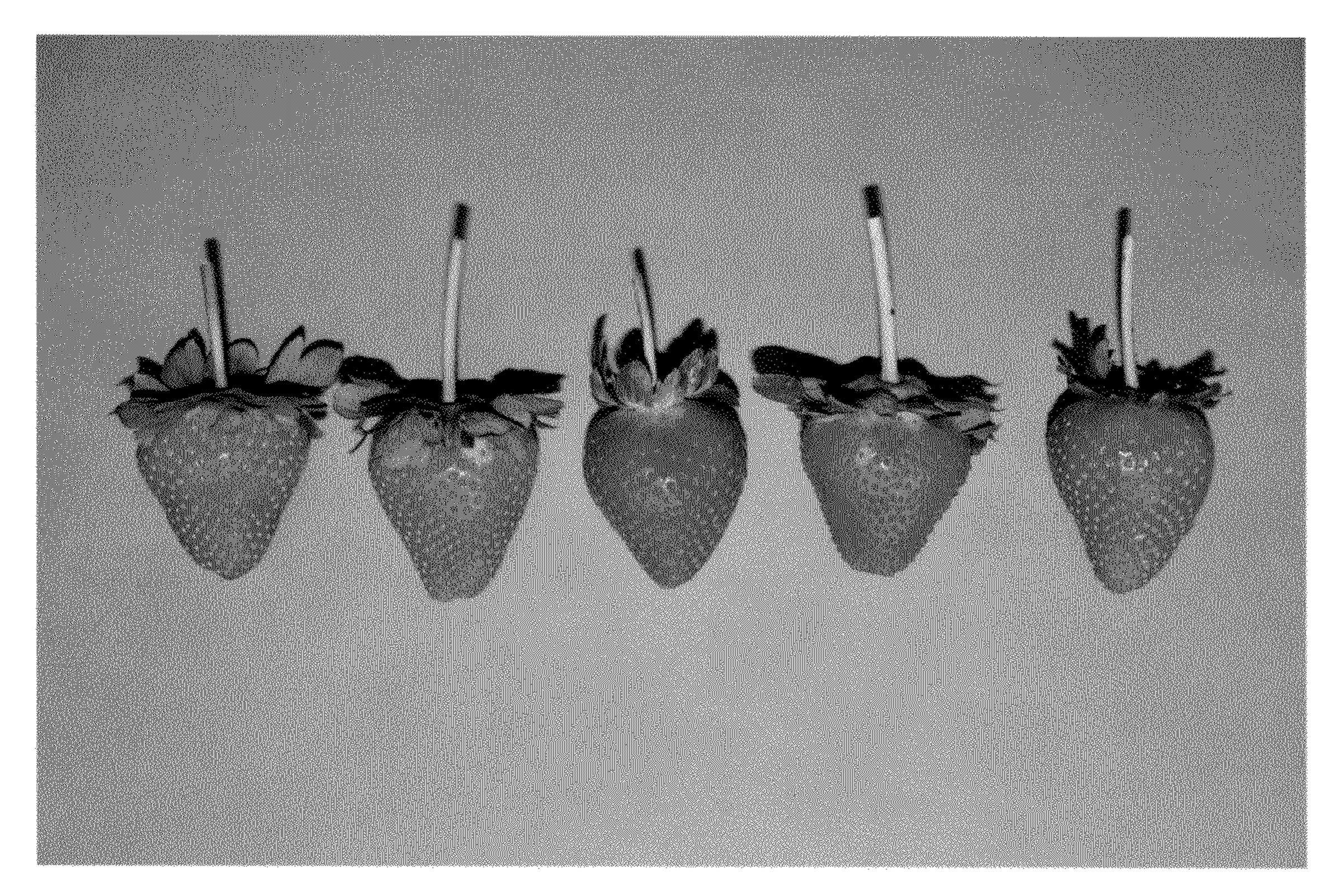


FIG. 4

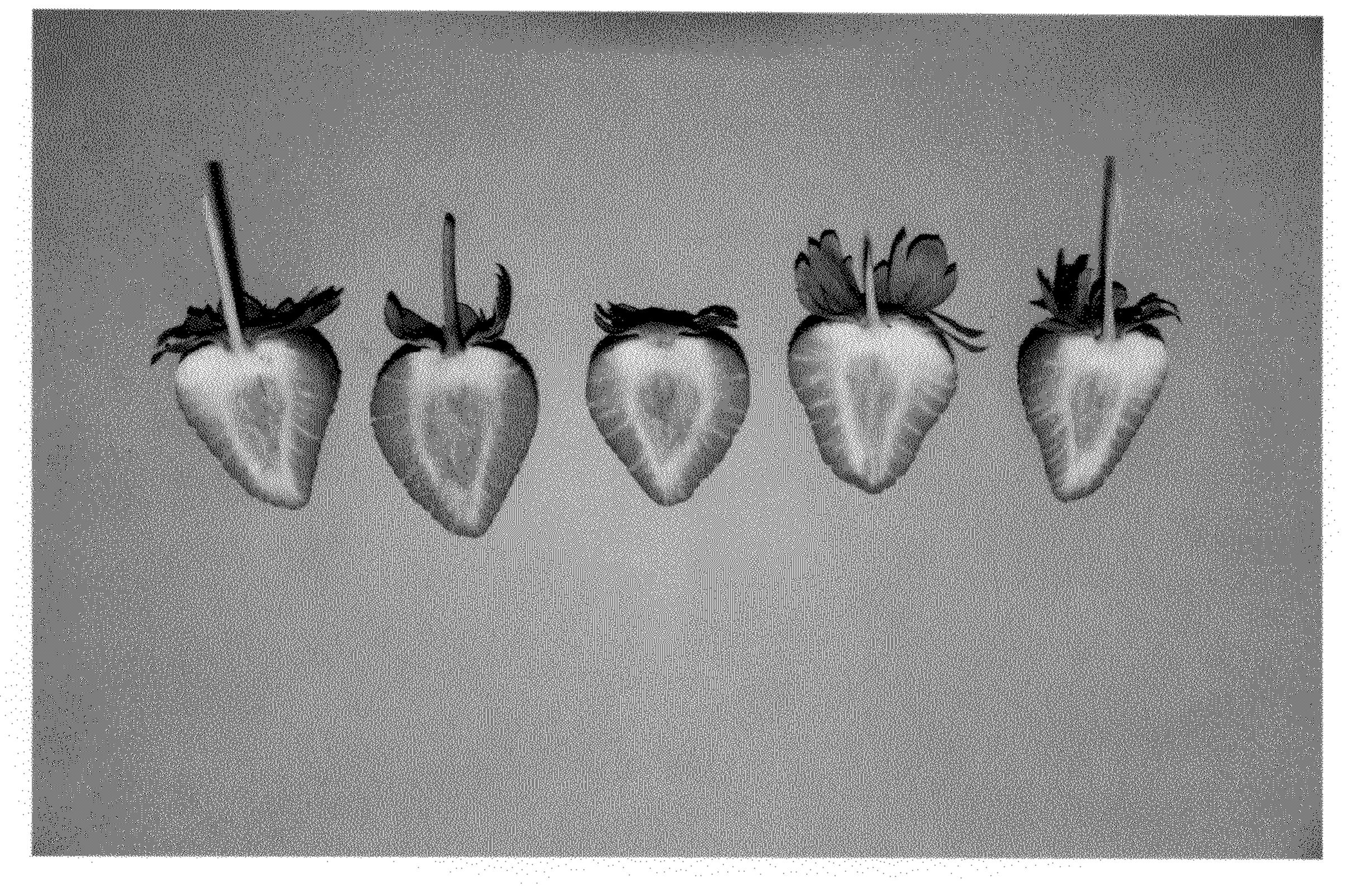


FIG. 5

### UNITED STATES PATENT AND TRADEMARK OFFICE

### CERTIFICATE OF CORRECTION

PATENT NO. : PP23,378 P2

APPLICATION NO. : 13/200895

DATED : February 5, 2013

INVENTOR(S) : Esther J. Pullen et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

Item (57), under THE ABSTRACT:

In Column 1, Line 11, delete "female" and insert -- male --, therefor.

In Column 1, Line 12, delete "male" and insert -- female --, therefor.

In Column 2, Line 37, delete "Female" and insert -- Male --, therefor.

In Column 2, Line 39, delete "Male" and insert -- Female --, therefor.

In Column 5, Line 8, delete "female" and insert -- male --, therefor.

In Column 5, Line 11, delete "male" and insert -- female --, therefor.

Signed and Sealed this Fifth Day of March, 2019

Andrei Iancu

Director of the United States Patent and Trademark Office