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# (54) STRAWBERRY PLANT VARIETY NAMED 'DRISSTRAWSEVENTYSEVEN'

- (50) Latin Name: *Fragaria x ananassa*Varietal Denomination: **DrisStrawSeventySeven**
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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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# (57) ABSTRACT

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A new and distinct variety of strawberry plant named 'DrisStrawSeventySeven', selected for its fruit size, yield, flavor, plant architecture, and open canopy, is disclosed.

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# STRAWBERRY PLANT VARIETY NAMED 'DRISSTRAWSEVENTYSEVEN'

Latin name:

Botanical classification: Fragaria x ananassa.

Varietal denomination The varietal denomination of the claimed variety of strawberry plant is 'DrisStrawSeventy-Seven'.

#### BACKGROUND OF THE INVENTION

Cultivated strawberry is a hybrid species of the genus *Fragaria* that is grown worldwide for its fruit. Modern strawberry was first bred in Brittany, France, in the 18<sup>th</sup> century by crossing *Fragaria virginiana* with *Fragaria* 15 *chiloensis*. Strawberry fruit is an aggregate accessory fruit, with the fleshy part of the fruit being derived from the receptacle that holds the ovaries.

Strawberry varieties vary widely in color, size, shape, flavor, season of ripening, degree of fertility, and susceptibility to disease. Certain varieties vary in foliage, and some vary in the relative development of their reproductive organs. Typically, strawberry flowers appear hermaphroditic in structure, but function as either male or female. Generally, commercial production of strawberry plants involves propagation from runners and distribution as either plugs or bare root plants. Cultivation is either perennial or annual plasticulture. During the off season, strawberries can also be produced in greenhouses.

Strawberry fruit is widely appreciated for its characteristic 30 bright red color, aroma, juicy texture, and sweetness. Strawberry fruit is a popular fruit that is generally consumed either fresh or in prepared foods, such as preserves and baked goods.

Strawberry is an important and valuable fruit crop. 35 Accordingly, there is a need for new varieties of strawberry plants. In particular, there is a need for improved varieties of strawberry plant that are stable, high yielding, and agronomically sound.

#### SUMMARY OF THE INVENTION

In order to meet these needs, the present invention is directed to an improved variety of strawberry plant. In particular, the invention relates to a new and distinct variety 45 of strawberry plant (*Fragaria x ananassa*), which has been denominated as 'DrisStrawSeventySeven'.

Strawberry plant variety 'DrisStrawSeventySeven' originated from a cross between the proprietary female parent '92T351' (unpatented) and the proprietary male parent '69U144' (unpatented). Progeny plants from this cross, including 'DrisStrawSeventySeven', were asexually propagated via stolons in McArthur, Shasta County, Calif. in September of 2012. Strawberry plant variety 'DrisStrawSeventySeven' was later specifically identified and selected in Ventura County, Calif. in January of 2013.

'DrisStrawSeventySeven' was subsequently asexually propagated via stolons, and underwent further testing at a farm in Oxnard, Ventura County, Calif. for seven years (2012 to 2019). The present variety has been found to be stable and reproduce true to type through successive asexual propagations via stolons.

'DrisStrawSeventySeven' exhibits the following distinguishing characteristics when grown under normal horticultural practices in Oxnard, Ventura County, Calif.:

- 1. Inflorescence on the same level as foliage;
- 2. Cordate shape of fruit; and
- 3. Partially remontant type of bearing.

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'DrisStrawSeventySeven' was selected for its fruit size, yield, flavor, plant architecture, and open canopy.

#### DESCRIPTION OF THE DRAWINGS

This new strawberry plant is illustrated by the accompanying photographs which show fruit of the plant, flowers, leaves, and the plants. The colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of plants that are twenty-five weeks old.

FIG. 1 illustrates whole fruit of variety 'DrisStrawSeventySeven'.

FIG. 2 illustrates longitudinal sections of fruit of variety 'DrisStrawSeventySeven'.

FIG. 3 shows the upper and lower surfaces of flowers of variety 'DrisStrawSeventySeven'.

FIG. 4A shows the lower surface of a leaf of variety 'DrisStrawSeventySeven'. FIG. 4B shows the upper surface of a leaf of variety 'DrisStrawSeventySeven'.

FIG. 5 illustrates a plant of variety 'DrisStrawSeventy-Seven'.

FIG. 6 illustrates a field of variety 'DrisStrawSeventy-Seven'.

#### DETAILED BOTANICAL DESCRIPTION

The following detailed descriptions set forth the distinctive characteristics of 'DrisStrawSeventySeven'. The data which define these characteristics is based on observations taken in Ventura County, Calif. from 2012 to 2019. 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. 'DrisStrawSeventySeven' has not been observed under all possible environmental conditions. The botanical description of 'DrisStrawSeventySeven' was taken from plants that were twenty-five weeks 40 old. The indicated values represent averages calculated from measurements of several plants. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (2007 edition). Descriptive terminology follows the Plant Identification Terminology, An Illustrated Glossary, 2<sup>nd</sup> edition by James G. Harris and Melinda Woolf Harris, unless where otherwise defined. Classification:

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Species.—Fragaria x ananassa.
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Common name.—Strawberry.

Denomination.—'DrisStrawSeventySeven'.

# Parentage:

Female parent.—The proprietary variety '92T351' (unpatented).

*Male parent.*—The proprietary variety '69U144' (unpatented).

Plant:

Height.—26.54 cm.

Diameter.—38.35 cm.

Number of crowns per plant.—5.

Growth habit.—Semi-upright.

## Stolon:

Average number of daughter plants per square foot.—

Diameter at bract.—4.21 mm.

Anthocyanin coloration.—Medium.

Anthocyanin color.—RHS N34B (Strong reddish orange).

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Overall color.—RHS 143C (Strong yellow-green). Pubescence.—Dense.

Leaf:

*Number of leaflets.*—Three only.

Color of upper surface.—RHS 137A (Moderate olive 5

Color of lower surface.—RHS 139C (Moderate yellow-green).

Texture.—Medium.

Vein color.—RHS 139C (Moderate yellow-green).

Venation pattern.—Pinnate and conspicuous.

Variegation.—Absent.

Terminal leaflets.—Length: 9.42 cm. Width: 7.57 cm. Length/width ratio: 1.24. Number of teeth/terminal leaflet: 20. Shape of base: Obtuse. Margin: Serrate to 15 crenate. Shape in cross section: Concave.

Petiole.—Length: 22.48 cm. Diameter: 5.3 mm. Attitude of hairs: Slightly outwards. Bract frequency (number present on each petiole): 0. Color: RHS 143C (Strong vellow-green).

Petiolule.—Length: 9.6 mm. Diameter: 2.5 mm. Color: RHS 143C (Strong yellow-green).

Stipule.—Length: 3.44 cm. Width: 11.6 mm. Anthocyanin coloration: Medium. Anthocyanin color: RHS 59B (Deep purple-red). Overall color: RHS 25 139D (Moderate yellow-green). Pubescence: Light.

Inflorescence:

Position in relation to foliage.—Same level.

Pedicel.—Attitude of hairs: Slightly outwards. Length: 185 mm. Color: RHS 143C (Strong yellow-green). 30 Peduncle.—Color: RHS 143C (Strong yellow-green). Diameter: 5.52 mm.

Flower bud.—Length: 16.05 mm. Width: 8.63 mm. Shape: Cup. Color: RHS 145B (Light yellow-green).

Flower.—Flower diameter (petal tip to petal tip on 35 non-flattened flower): 27.5 mm. Arrangement of petals: Overlapping. Stamen: Present. Typical and observed number of flowers per plant: 44.

Petal.—Length: 11.7 mm. Width: 11.7 mm. Length/ width ratio: 1. Typical and observed petal number: 6. 40 Color of upper side: RHS NN155C (White). Color of lower surface: RHS 155D (Yellowish white). Texture: Thin.

Calyx.—Diameter (sepal tip to sepal tip, measured on back of flower): 54.7 mm.

Sepal.—Length (sepal tip to point of attachment to receptacle): 22.9 mm. Width: 4.6 mm. Typical and observed sepal number: 12. Overall color: RHS 137B (Moderate olive green). Texture: Medium.

Rounded. Color: RHS 135D (Light yellowish green).

Style.—Length: 1.62 mm. Width: 0.31 mm. Shape: Tubular. Color: RHS 136D (Light yellowish green). Ovary.—Length: 11.98 mm. Width: 9.79 mm. Color:

RHS 136D (Light yellowish green). Stamen.—Length: 2.54 mm. Width: 0.68 mm. Color:

RHS 135D (Light yellowish green). Anther.—Length: 2.21 mm. Width: 1.34 mm. Shape:

Lanceolate to elliptic. Color: RHS 13A (Vivid yel-

Pollen.—Color: RHS 13A (Vivid yellow).

Fruit:

Length.—55.9 mm.

Width.—43.5 mm.

Length/width ratio.—1.3.

Fruit hollow length.—28.8 mm.

Fruit hollow width.—6.7 mm.

Fruit hollow length/width ratio.—4.3.

Shape.—Cordate.

Color.—RHS N45A (Moderate red).

Position of achenes.—Below surface.

Number of achienes per fruit.—367.

Achene length.—1.91 mm.

Achene width.—0.81 mm.

Achene shape.—Elliptical.

Achene color.—RHS N167A (Brownish orange).

Position of calyx attachment.—Level with fruit.

Attitude of sepals.—Upwards.

Color of flesh (excluding core).—RHS 34A (Vivid reddish orange).

Color of core.—RHS 34B (Vivid reddish orange).

Fruit weight.—33 grams.

Production:

Flowering interval.—October-May.

Harvest interval.—November-June.

*Type of bearing.*—Partially remontant.

Productivity.—6,109 kg to 8,343 kg of fruit per acre per season from five-month-old plants when grown in Oxnard, Ventura County, Calif.

Market use of fruit.—Fresh and processing markets.

Shipping and storage characteristics.—Following harvest, fruit can be stored for 9-11 days if maintained under cooled temperatures that are standard for strawberry storage.

Resistance to diseases, pests, and abiotic stress:

Heat.—Moderately resistant.

Two-spotted spider mite (Tetranychus urticae).—Moderately susceptible.

Botrytis fruit rot (Botrytis cinerea).—Moderately resistant.

Powdery mildew (Podosphaera macularis).—Moderately resistant.

Anthracnose crown rot (Colletotrichum acutatum).— Moderately resistant.

Winter hardiness.—Moderate.

## COMPARISON WITH PARENTAL AND COMMERCIAL VARIETIES

'DrisStrawSeventySeven' differs from the proprietary 45 female parent '92T351' (unpatented) in that 'DrisStrawSeventySeven' has earlier yields, produces fruit that are sweeter, firmer, and more aromatic, and has better rain tolerance as compared to '92T351'.

'DrisStrawSeventySeven' differs from the proprietary Stigma.—Length: 0.36 mm. Width: 0.22 mm. Shape: 50 male parent '69U144' (unpatented) in that 'DrisStrawSeventySeven' has earlier yields, produces fruit that are sweeter, firmer, and more aromatic, and has better rain tolerance as compared to '69U144'.

'DrisStrawSeventySeven' differs from the commercial 55 variety 'DrisStrawTwentySeven' (U.S. Plant Pat. No. 23,400) in that 'DrisStrawSeventySeven' has inflorescence on the same level as foliage, calyx attachment level with fruit, a cordate shape of fruit, and a partially remontant type of bearing, whereas 'DrisStrawTwentySeven' has inflores-60 cence above foliage, calyx attachment raised from fruit, a conical shape of fruit, and a not remontant type of bearing.

'DrisStrawSeventySeven' differs from the commercial variety 'DrisStrawThirtySix' (U.S. Plant Pat. No. 25,698) in that 'DrisStrawSeventySeven' has inflorescence on same 65 level as foliage, an obtuse shape of base of terminal leaflet, a cordate shape of fruit, and a partially remontant type of bearing, whereas 'DrisStrawThirtySix' has inflorescence

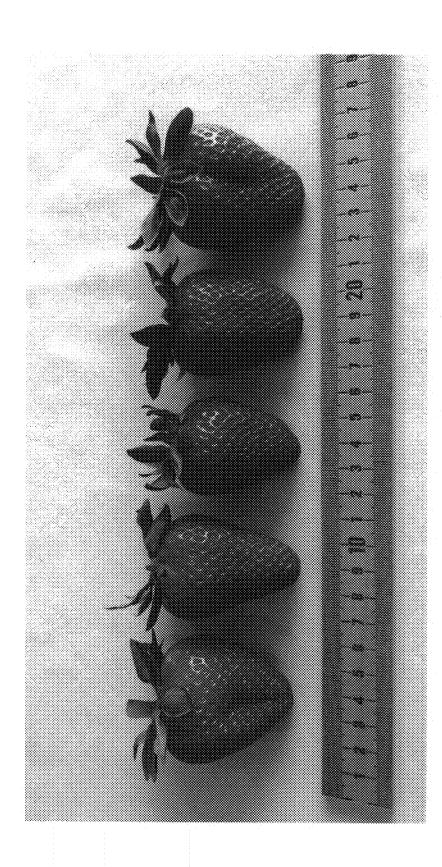
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above foliage, an acute shape of base of terminal leaflet, a conical shape of fruit, and a not remontant type of bearing. We claim:

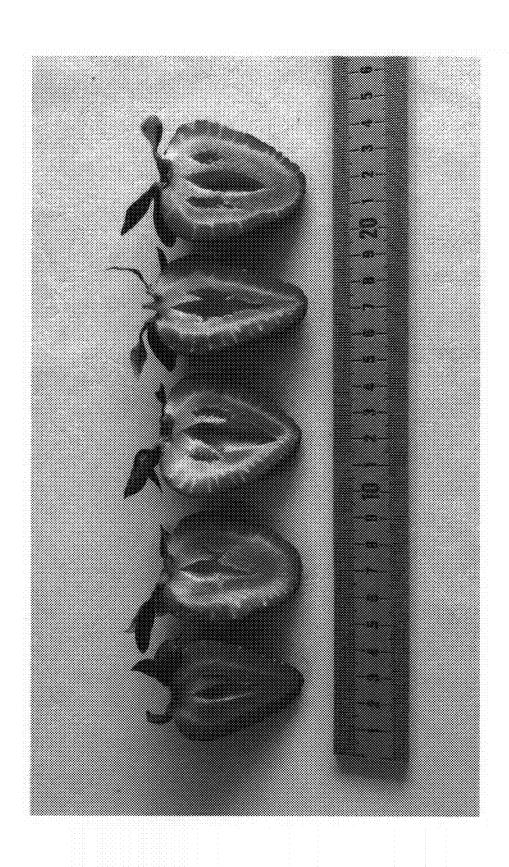
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1. A new and distinct variety of strawberry plant named 'DrisStrawSeventySeven' as shown and described herein. 5

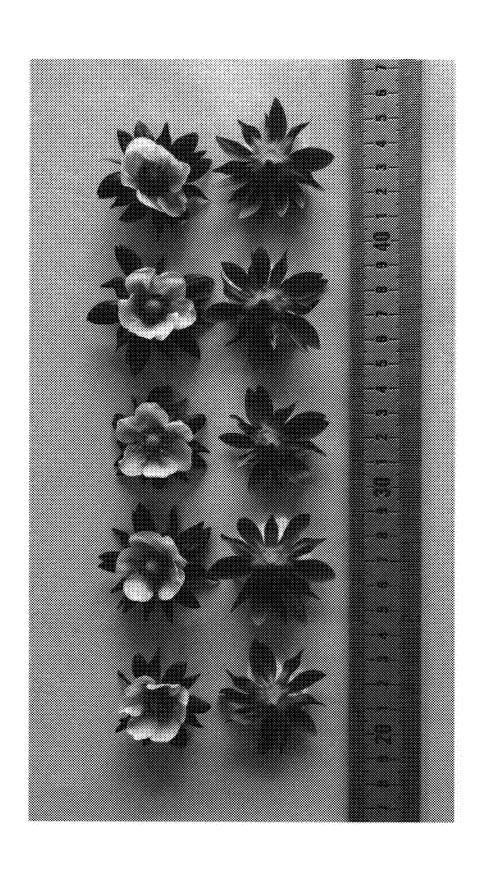
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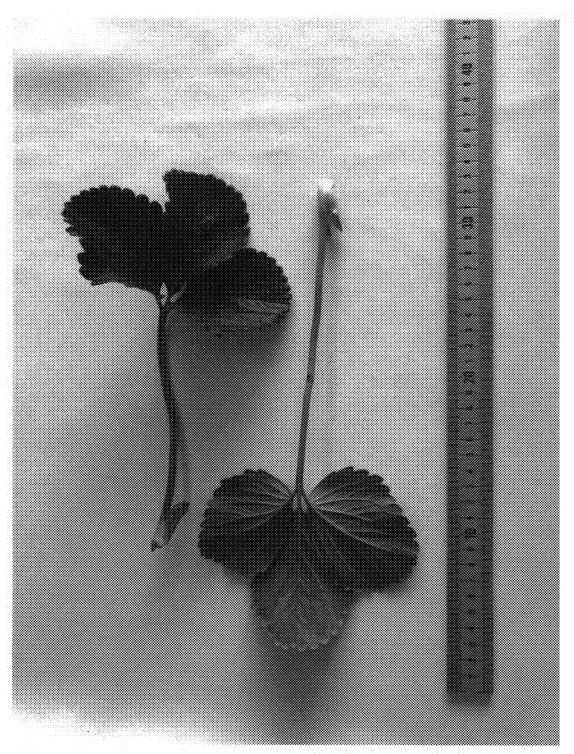


FIG. 4B

FIG. 4A

