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(54) **STRAWBERRY PLANT NAMED 'VAULTER'**

(50) Latin Name: ***Fragaria x ananassa***
Varietal Denomination: **Vaulter**

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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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A01H 5/08 (2018.01)
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USPC **Plt./209**
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(58) **Field of Classification Search**
USPC Plt./208, 209
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(57) **ABSTRACT**

The present invention provides a new and distinct strawberry plant designated as 'Vaulter' (a.k.a. '109261').

3 Drawing Sheets

Latin name of the genus and species: *Fragaria* x *ananassa.*

Varietal denomination: 'Vaulter' (a.k.a. '109261').

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct strawberry plant designated as 'Vaulter' (a.k.a. '109261'). 'Vaulter' is a day neutral strawberry plant.

'Vaulter' (a.k.a. '109261') is the result of a controlled-cross between a female parent cultivar designated '108171' (unpatented, proprietary cultivar) and a male parent cultivar designated '108229' (strawberry plant named 'Flame', U.S. Plant Pat. No. 28,470) made by the Inventor and was first fruited in Watsonville, Calif. growing fields. Following selection and during testing, the plant was originally designated '109261' and subsequently named 'Vaulter'.

This new strawberry plant was asexually reproduced via runners (stolons) by the inventor at Watsonville, Calif. Asexual propagules from the original source have been tested in Watsonville growing fields and to a limited extent, grower fields in high elevation. The properties of this new strawberry plant were found to be transmissible by such asexual reproduction. This new strawberry plant is stable and reproduce true to type in successive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

This invention relates to a new and distinctive strawberry plant designated as 'Vaulter'. This strawberry plant is primarily adapted to the climate and growing conditions of the central coast of California. This region provides the necessary temperatures required for it to produce a strong vigorous plant and to remain in fruit production from March through October. The nearby Pacific Ocean provides the

needed humidity and moderate day temperatures and evening chilling to maintain fruit quality for the production months.

The following traits and photographs in combination distinguish strawberry plant 'Vaulter' from known strawberry varieties. In addition, this new strawberry plant was confirmed to be a unique strawberry germplasm when tested against the California Seed & Plant Lab, Inc. (Elverta, Calif.) database using Short Sequence Repeats (SSRs). Plants for the botanical measurements in the present application were grown as annuals. Any color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The fruit produced by each new cultivar is attractive and of excellent quality.

DESCRIPTION OF THE DRAWINGS

The accompanying color photographs depict various characteristics of the cultivars as nearly true as possible to make color reproductions.

FIG. **1** shows fruits of 'Vaulter'.

FIG. **2** shows sliced fruits of 'Vaulter'.

FIG. **3** shows 'Vaulter' plants.

DETAILED DESCRIPTION OF THE INVENTION

'Vaulter' (a.k.a. '109261')

This invention relates to a new and distinctive day-neutral type strawberry cultivar designated as 'Vaulter'. It is primarily adapted to the climate and growing conditions of the central coast of California. This region provides the necessary temperatures required for it to produce a strong vigorous plant and to remain in fruit production from March through October. The nearby Pacific Ocean provides the

needed humidity and moderate day temperatures and evening chilling to maintain fruit quality for the production months.

The following traits in combination distinguish strawberry variety 'Vaulter' from the known strawberry varieties. Plants for the botanical measurements in the present application were grown as annuals. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

The detailed botanical description in Table 1 was observed when the plants were 33 weeks after planting. The plants observed were grown in a plot located on a commercial strawberry farm, at 187 San Andreas Rd, Watsonville, Calif. The outdoor field without cover was a sandy loam on a polyethylene-film-covered-raised-bed. A grower standard 1.25 mil thickness of polyethylene film was used to cover raised bed. Each row was spaced 52 inches apart according to a grower standard.

'Vaulter' has not been observed under all possible environmental conditions, and the phenotype may vary significantly with variations in environment. The following observations, measurements, and comparisons describe this plant as grown under normal conditions in Watsonville, Calif. unless otherwise noted.

TABLE 1

	Vaulter	
Char Type	Characteristic	Vaulter
General	Plant Habit	annual
	Plant Growth Habit	upright
	Plant Height	35 cm
	Plant Width	41 cm
	Plant Width-Crown	6.5 cm
	Density of foliage, vigor	light
	Plant vigor	moderate to high
Leaf	Terminal leaflet width (mm)	90
	Terminal leaflet length (mm)	83
	No. teeth/terminal leaflet:	20
	Shape of the terminal leaflet base	acute to obtuse
	Shape of terminal leaflet in cross-section	concave
	Margin description of the terminal	serrate
	Color of upper side of leaves	137A
	Color of lower side of leaves	139A
	Leaf blistering	weak
	Leaf glossiness	medium
Limbs	Petiole length (cm)	23
	Petiole diameter (mm)	3.55
	Petiole color	145B
	Petiolule length (mm)	20
	Petiolule diameter (mm)	3.55
	Attitude of hairs on petiole and pedicel	upwards
	Stipule pubescence	sparse
	Stipule length (cm)	3.1
	Stipule size	small to medium
	Stipule width (cm)	0.9
	Stipule anthocyanin	present
	Stipule color (color code)	145A
	Pedicel color (color code)	145A
	Peduncle length (cm)	24.5
	Peduncle size	medium to large
	Peduncle attitude	erect
	Peduncle pubescence, attitude of hairs	medium, upwards
Inflorescence	Inflorescence position relative to foliage	above
	Flower arrangement of petals	free to touching
	Petal length (cm)	1.2
	Petal width (cm)	1.1
	Petal number per flower	6

TABLE 1-continued

	Vaulter	
Char Type	Characteristic	Vaulter
	Upper Petal color	155C
	Lower Petal color	155C
	Calyx diameter (cm)	3.2
	Corolla diameter (cm)	3.1
	Sepal length (cm)	0.12
	Sepal width (cm)	0.6
	Time of flowering (50% of plants in bloom)	March
	Shape of stigma	capitate
	Color of stigma	15D
	Length of style (mm)	2
	Color of style	4A
	Color of the ovary	145C
	Length of the stamens (mm)	4.5
	Number of stamen	29
	Anther color	20A
	Shape of anther	dorsifixed
	Size of anther	small
	Amount of pollen	scarce to moderate
	Color of pollen	7D
	Color of filament	149D
	Length of filament (mm)	4
	Number of flowers per truss	3 to 5
Stolon	Stolon number	6
	Stolon anthocyanin	183A
	Widest diameter of stolon At leaf attachment (mm)	5.07
	Stolon color	145A
Fruit	Number of fruit per truss	3 to 4
	Fruit length (cm)	5
	Fruit width (cm)	4.5
	Fruit skin color	44A
	Fruit flesh color excluding core	44A
	Fruit core length (cm)	4.2
	Fruit core width (cm)	1.8
	Fruit core color	41B
	Fruit weight (g)	30.5
	Predominant fruit shape	conic to globose conic
	Shape difference between primary & secondary fruits	Similar shape
	Width of band without of achenes	medium
	Fruit glossiness	strong
	Position of achenes	even to below surface
	Achene color	145A
	Achenes per fruit	252
	Achene weight (g)	0.11
	Position of calyx	even to inserted
	level of adherence of calyx	strong
	Color of calyx	137A
	Firmness of flesh	medium to firm
	Evenness of flesh color	nearly even
	Sweetness (brix)	7.5
	pH	3.32
	Yield (g per plant per season)	2658

When 'Vaulter' is compared to the proprietary female parent (108171), 'Vaulter' has a greater fruit yield than the female parent. The volumetric fruit shape of 'Vaulter' is a fuller figure than a long conic shaped fruit of the female parent.

When 'Vaulter' is compared to the proprietary male parent 'Flame' (U.S. Plant Pat. No. 28,470), the fruit pulp of 'Flame' has a deep red color, while 'Vaulter' has a pale color. In terms of plant shape, 'Vaulter' is more upright than 'Flame'.

When 'Vaulter' is compared to the check variety 'Monterey' (U.S. Plant Pat. No. 19,767), the ratio of flower stem length compared to petiole length for 'Vaulter' is longer than that of 'Monterey'. Consequently, 'Vaulter' flowers are placed above the leaf canopy further than 'Monterey' flowers. Also, the ripened fruits of 'Vaulter' hang

down below the plant further than those of 'Monterey' on the raised bed. 'Vaulter' leaves are thinner than 'Monterey' leaves in terms of leaf thickness. In terms of fruit hardness, 'Vaulter' fruits are softer than 'Monterey' fruits. 'Vaulter' has more open space between the leaves than 'Monterey'. That is, the foliage of 'Vaulter' is less dense than that of 'Monterey'. Furthermore, 'Vaulter' differs from 'Monterey' as 'Vaulter' does not produce stolons during the fruiting season.

TABLE 2

Comparison of fruit features of 'Vaulter' with the proprietary male and female parents

HYBRID ID	HYBRID NAME	FRUIT WIDTH (mm)	FRUIT HEIGHT (mm)	FRUIT RATIO (Height/Width)
108171	Female Parent	40.13	46.90	1.17
108229 (Flame)	Male Parent	40.46	45.86	1.13
109261	Vaulter	41.32	45.37	1.10

HYBRID ID	FRUIT SHAPE*	HARDNESS (newtons)	Yield (g/clone)
108171	7	6.80	688
108229 (Flame)	6	7.79	1196
109261	6	7.32	744

*Fruit shape: 1. Oblate; 2. Globose; 3. Fan Lobes; 4. Necked; 5. Short wedge; 6. Symmetric conic; 7. Conic; 8. Long conic; 9. Long wedge

TABLE 3

Comparison of fruit features between 'Vaulter' and the check variety

HYBRID ID	HYBRID NAME	FRUIT WIDTH (mm)	FRUIT HEIGHT (mm)	FRUIT RATIO (Height/Width)
Check Variety	Montery (U.S. Plant Pat. No. 19,767)	43.70	48.33	1.11
109261	Vaulter	41.32	45.37	1.10

HYBRID ID	FRUIT SHAPE*	HARDNESS (newtons)	Yield (g/clone)
Check Variety	6	9.04	840
109261	6	7.32	744

*Fruit shape: 1. Oblate; 2. Globose; 3. Fan Lobes; 4. Necked; 5. Short wedge; 6. Symmetric conic; 7. Conic; 8. Long conic; 9. Long wedge

The invention claimed is:

1. A new and distinct cultivar of strawberry plant named 'Vaulter' substantially as shown and described herein.

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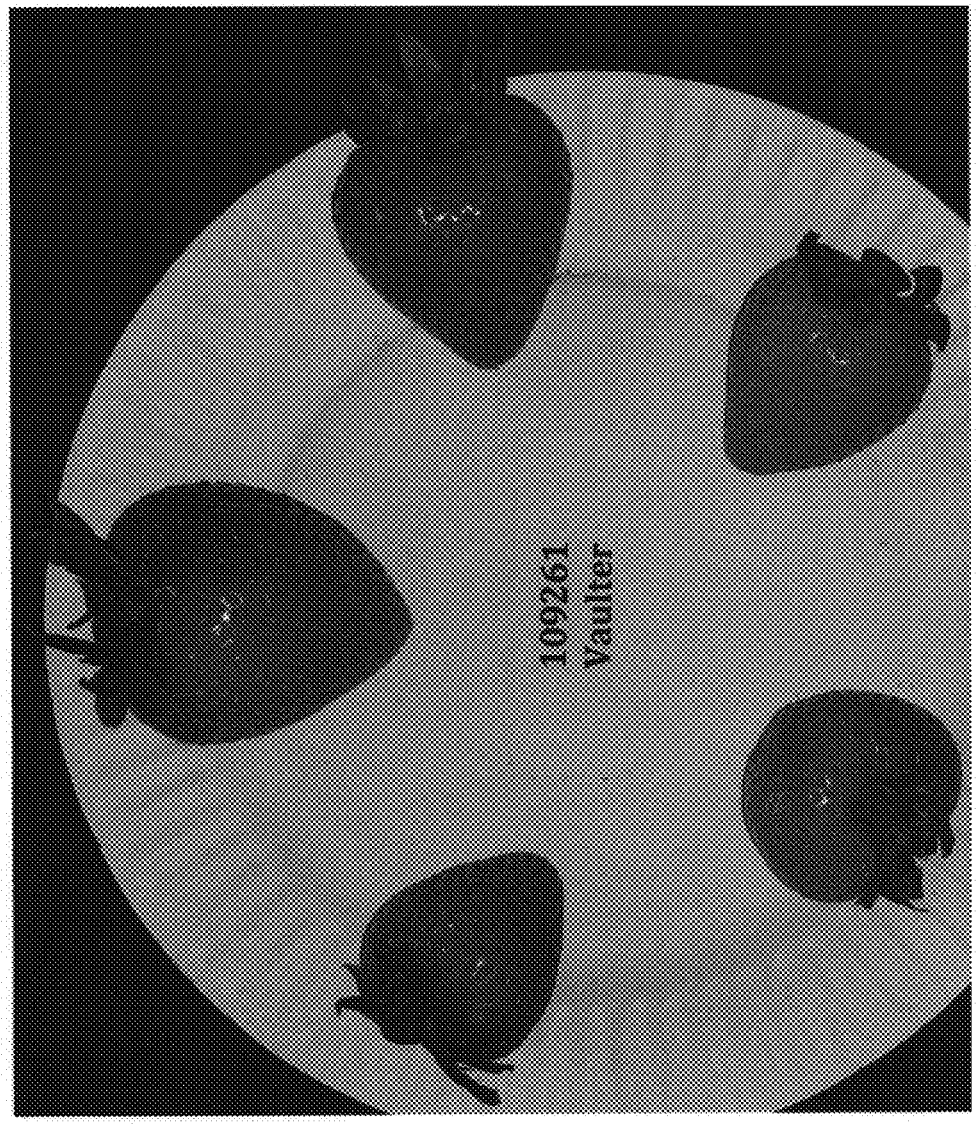

Figure 1

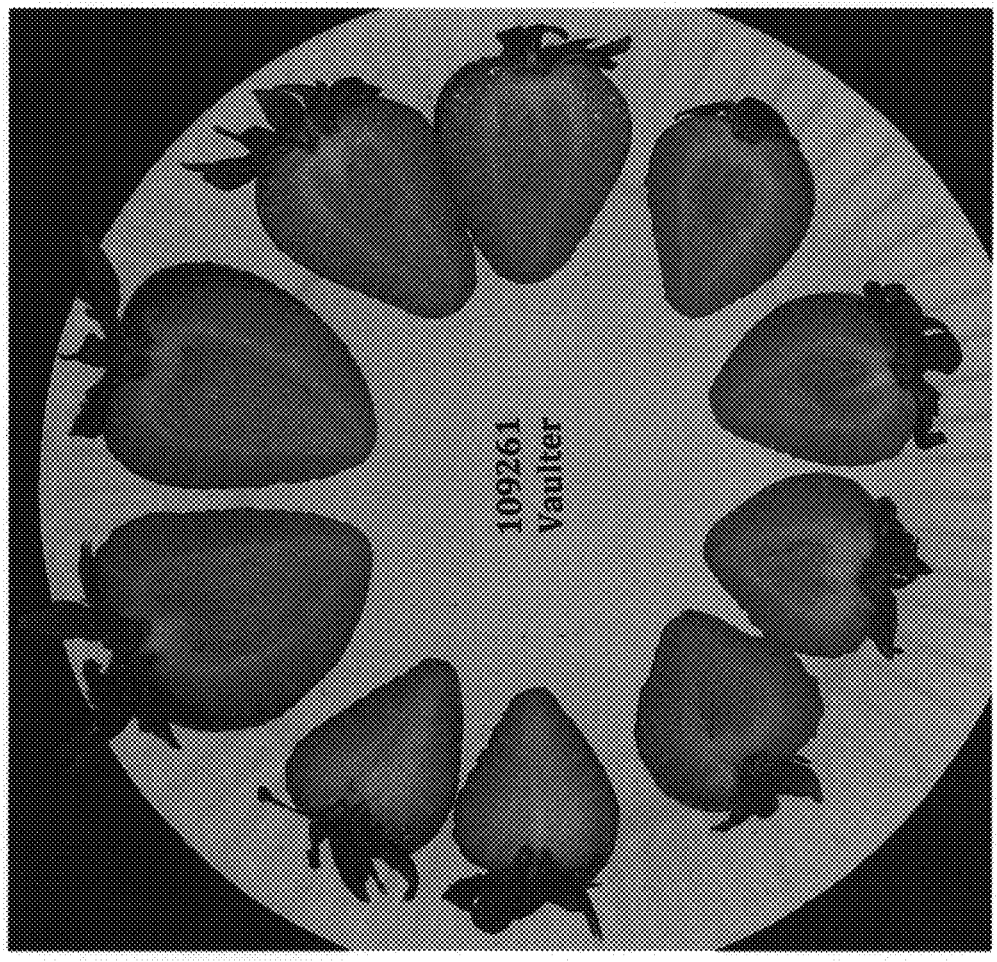

Figure 2

Figure 3