



(12) **United States Plant Patent**
Leis et al.

(10) **Patent No.:** **US PP29,793 P3**
(45) **Date of Patent:** **Nov. 6, 2018**

- (54) **STRAWBERRY PLANT NAMED ‘CIVN260’**
- (50) Latin Name: *Fragaria ananassa* Duch.
Varietal Denomination: **CIVN260**
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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.
- (21) Appl. No.: **15/731,441**
- (22) Filed: **Jun. 12, 2017**
- (65) **Prior Publication Data**
US 2018/0042155 P1 Feb. 8, 2018

- (51) **Int. Cl.**
A01H 5/08 (2018.01)
A01H 6/74 (2018.01)
- (52) **U.S. Cl.**
USPC **Plt./208**
CPC *A01H 6/7409* (2018.05); *A01H 5/08*
(2013.01); *A01H 5/0893* (2013.01)
- (58) **Field of Classification Search**
USPC **Plt./208, 209**
See application file for complete search history.

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(57) **ABSTRACT**

This invention relates to a new and distinct variety of
strawberry plant named ‘CIVN260’. This new strawberry
plant named ‘CIVN260’ is primarily adapted high chill
growing conditions, and is primarily characterized by its
plants with erect leaves and visible, easy to collect fruits;
fruits with regular and conical shape; easy pollination;
excellent consistency; and great taste with high sugar con-
tent and aroma.

4 Drawing Sheets

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Latin name of the genus and species of the plant claimed:
Fragaria ananassa Duch.
Variety denomination: ‘CIVN260’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct straw-
berry variety named ‘CIVN260’. The variety is botanically
known as *Fragaria ananassa* Duch.

The new strawberry ‘CIVN260’ is a product of a planned
breeding program conducted by the inventors, Michelangelo
Leis and Alessio Martinelli in San Giuseppe di Comacchio,
Ferrara, Italy. The objective of the breeding program is to
develop a new strawberry variety with high resistance to
powdery mildew and general resistance to leaf and root
disease; fruits with regular and conical shape; bright color;
excellent consistency; and good taste and aroma even at high
temperatures.

This new strawberry ‘CIVN260’ is a result of a controlled
cross made by the inventors in 2009, in San Giuseppe di
Comacchio, Ferrara, Italy. The female or seed parent is
strawberry variety designated ‘NABILA’ (Patented, U.S.
Plant Pat. No. 23,338). The male or pollen parent is straw-
berry variety designated ‘CLERY’ (Protected, CPVO Grant
No. 16743).

The new strawberry ‘CIVN260’ was discovered and
selected by the inventors as a single flowering plant within
the progeny of the stated cross in May 2011 in San Giuseppe
di Comacchio, Ferrara, Italy (44° 45' North and 12° 11'
East). After its selection, the new variety was asexually
propagated by stolons in a nursery located in San Giuseppe
di Comacchio, Ferrara, Italy. The new variety was exten-

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sively tested over the next several years in different Euro-
pean area with high chill conditions. This propagation has
demonstrated that the combination of combination of char-
acteristics as herein disclosed for the new cultivar are firmly
fixed and retained through successive generations of asexual
reproduction. The new cultivar reproduces true to type.

BRIEF SUMMARY OF THE INVENTION

‘CIVN260’ is primarily adapted to the climate and grow-
ing with high chill conditions. This area provides the needed
correct temperatures for flower induction and to produce a
strong and vigorous plant and maintain fruit quality during
fall production.

The following traits have been repeatedly observed and
are determined to be unique characteristics of ‘CIVN260’,
which in combination distinguish this strawberry plant as a
new and distinct variety:

1. plants with erect leaves and visible fruits;
2. easy to collect;
3. fruits with regular and conical shape;
4. easy to pollinate;
5. excellent consistency; and
6. great taste with high sugar content and aroma.

Plants of the new strawberry variety ‘CIVN260’ differ
from plants of the parents, ‘NABILA’ and ‘CLERY’. in the
characteristics described in Table 1.

TABLE 1

Comparison with parent varieties			
Characteristic	'CIVN260'	'NABILA'	'CLERY'
Time of ripening	Very early to early	Medium	Very early to early
Grow habit	Upright	Upright	Semi-upright
Plant vigour	Strong	Medium	Medium to strong
Fruit size	Large to very large	Large	Large
Firmness	Strong	Firm	Medium
Sweetness	Higher	Medium to high	Medium

Of the many commercial cultivars known to the present inventor, the most similar in comparison to the new strawberry variety 'CIVN260' is the male parent variety 'CLERY'. Plants of the new strawberry variety 'CIVN260' differ from plants of 'CLERY' in the characteristics described in Table 2:

TABLE 2

Comparison with Similar Variety		
Characteristic	'CIVN260'	'CLERY'
Grow habit	Upright	Semi-upright
Plant vigour	Strong	Medium to strong
Fruit size	Large to very large	Large
Firmness	Strong	Medium
Sweetness	Higher	Medium

BRIEF DESCRIPTIONS OF THE PHOTOGRAPHS

The accompanying color photographs illustrate the overall appearance of typical specimens of the new strawberry variety 'CIVN260', at various stages of development as true as it is reasonably possible with color reproductions of this type. Color in the photographs may differ slightly from the color value cited in the botanical description which accurately describe the color of 'CIVN260'. The depicted plant and plant parts of the new strawberry variety 'CIVN260' were taken in San Giuseppe di Comacchio, Ferrara, Italy, and are approximately 6 to 9 months old.

FIG. 1 shows typical plants of 'CIVN260';

FIG. 2 shows typical leaves of 'CIVN260';

FIG. 3 shows typical fruits of 'CIVN260';

FIG. 4 shows typical flowers of 'CIVN260'.

DETAILED BOTANICAL DESCRIPTION

'CIVN260' has not been observed under all possible environmental conditions. The characteristics of the new variety may vary in detail, depending upon variations in environmental factors, including weather (temperature, humidity and light intensity), day length, soil type and location.

The aforementioned photographs, together with the following observations, measurements and values describe the new strawberry variety 'CIVN260', unless otherwise noted, taken during the 2016 growing season in San Giuseppe di Comacchio, Ferrara, Italy. The observations, measurements and values were taken from plants of 'CIVN260' dug from a sea level-elevation nursery located in San Giuseppe di

Comacchio, Ferrara, Italy, during January 2015 and planted approximately 7 months later in San Giuseppe di Comacchio, Ferrara, Italy. Plants of the new strawberry variety 'CIVN260' were grown under conditions which closely approximate those generally used in commercial practice.

The observed plants were one year old plants. The plants used in the production field are produced in a nursery in San Giuseppe di Comacchio.

Yield observations and fruit quality characteristics are averaged from 3 years of data collected from the 2014 through 2016 growing seasons. Flower measurements and characteristics are from secondary flowers unless otherwise noted. Fruit characteristics and measurements are from secondary fruit unless otherwise noted.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), except where general colors of ordinary significance are used. Color values were taken under daylight conditions at approximately noon in San Giuseppe di Comacchio, Ferrara, Italy. The approximate age of the observed plants is about 7 months.

The following tables 3-9 describe fruit, plant, stolon, foliage, fruiting truss, flower and pest/disease characteristics of the new strawberry 'CIVN260'.

TABLE 3

FRUIT CHARACTERISTICS	
Characteristic	'CIVN260'
Color of mature fruit	Red group—RHS 44A
Color of internal flesh	Red group—RHS 42B
Length (cm)	5 cm
Width (cm)	3.5 cm
Ratio length/width	Moderately longer
Calyx diameter (cm)	1.5 cm
Average weight (gm)	20 gm
Achene color	Yellow-green group—RHS 151A
Number of achenes per cm ² measured at the center of berry	About 10
Average weight of 1000 achenes (g)	About 0.62
Marketable yield (gm/plt)	Average 834 gm/plt
Size	Large
Predominant shape	Conical
Difference in shapes between primary and secondary fruit	Slight
Band without achenes	Medium
Unevenness of surface	Weak
Evenness of color	Even or very slight uneven
Glossiness	Medium
Insertion of achenes	Below surface
Insertion of calyx	Slightly raised
Attitude of the calyx	Outwards
Size of calyx in relation to fruit diameter	Some size or slightly large
Adherence of calyx	Strong
Firmness of skin	Firm
Firmness of flesh	Firm
Distribution of red color of the flesh	Uniform
Hollow center expression	Absent or small
Flavor	Good taste with good aroma and sugar content
Soluble solids (% brix)	9°
Time of first flowering	28 Mar. 2016 in San Giuseppe di Comacchio, Ferrara, Italy
Time of first harvesting	Very early to early
Harvest period	April to June in San Giuseppe di Comacchio, Ferrara, Italy
Type of bearing	Not remontant

TABLE 4

PLANT CHARACTERISTICS	
Characteristic	'CIVN260'
Height (cm)	About 35 to 40 cm
Spread (cm)	About 50 cm
Size	Large
Habit	Upright
Density	Medium
Vigor	Medium to strong

TABLE 5

STOLON CHARACTERISTICS	
Characteristic	'CIVN260'
Average number per plant	8-12
Anthocyanin coloration	Red group—RHS 53B
Anthocyanin intensity	Very low
Diameter at bract (mm)	3 mm
Pubescence	Low

TABLE 6

FOLIAGE CHARACTERISTICS	
Characteristic	'CIVN260'
<u>Foliage:</u>	
Color of upper surface	Green group—RHS 137A
Color of underside	Green group—RHS 137C
Shape in cross section	Concave
Intervinal blistering	Medium
Glossiness	Weak
Number of leaflets	3 only
<u>Terminal Leaflet:</u>	
Length (cm)	About 12.5 cm
Width (cm)	About 10 cm
Length/width ratio	Moderately longer
Serrations/leaf	Overlapping
Size	Big
Shape of base	Obtuse
Shape of teeth	Serrate to crenate
<u>Petiole:</u>	
Length (cm)	About 30 cm
Diameter (mm)	About 4 mm
Pubescence	Weak
Attitude of hairs	Slightly outwards
<u>Stipule:</u>	
Length (mm)	About 15 mm
Width (mm)	About 5/6 mm at the base
Anthocyanin coloration	Weak
Color	Yellow-green group—RHS 145A

TABLE 7

FRUITING TRUSS CHARACTERISTICS	
Characteristic	'CIVN260'
Length (cm)	About 30 to 35 cm
Attitude	Erect
Position relative to foliage	Slightly down
Pubescence	Medium
Anthocyanin intensity	Absent or very low
Attitude at first pick	From 45° to horizontal

TABLE 8

FLOWER CHARACTERISTICS	
Characteristic	'CIVN260'
<u>Petal color</u>	
Mature (upper)	White group—RHS 155D
Mature (lower)	White group—RHS 155D
<u>Petal shape</u>	
Overall	Round
Apex	Rounded
Base	Rounded
Petal length (mm)	10 mm
Petal width (mm)	10 mm
Petal length/width ratio	Equal
Number of petals/flower	About 6
<u>Sepals color</u>	
Mature (upper)	Green group—RHS 142A
Mature (lower)	Green group—RHS 138C
<u>Sepal shape</u>	
Overall	Lancelolate
Apex	Pointed
Base	Flat
Sepal length (mm)	About 10 mm
Sepal width (mm)	About 5/6 mm
Sepal length/width ratio	Longer
Number of sepals/flower	About 12 to 14
Corolla diameter (mm)	About 30 mm
Calyx diameter (mm)	About 27 mm
Size of calyx relative to corolla	Smaller
Size of inner calyx relative to outer calyx	Some size
Relative position of petals	Free to touching

TABLE 9

PEST AND DISEASE REACTIONS	
50	'CIVN260' shows high resistance to powdery mildew and generally to leaf and root diseases.

We claim:

- 55 1. A new and distinct variety of strawberry plant named 'CIVN260', as herein described and illustrated by the characteristics set forth above.

* * * * *

FIG. 1



FIG. 2

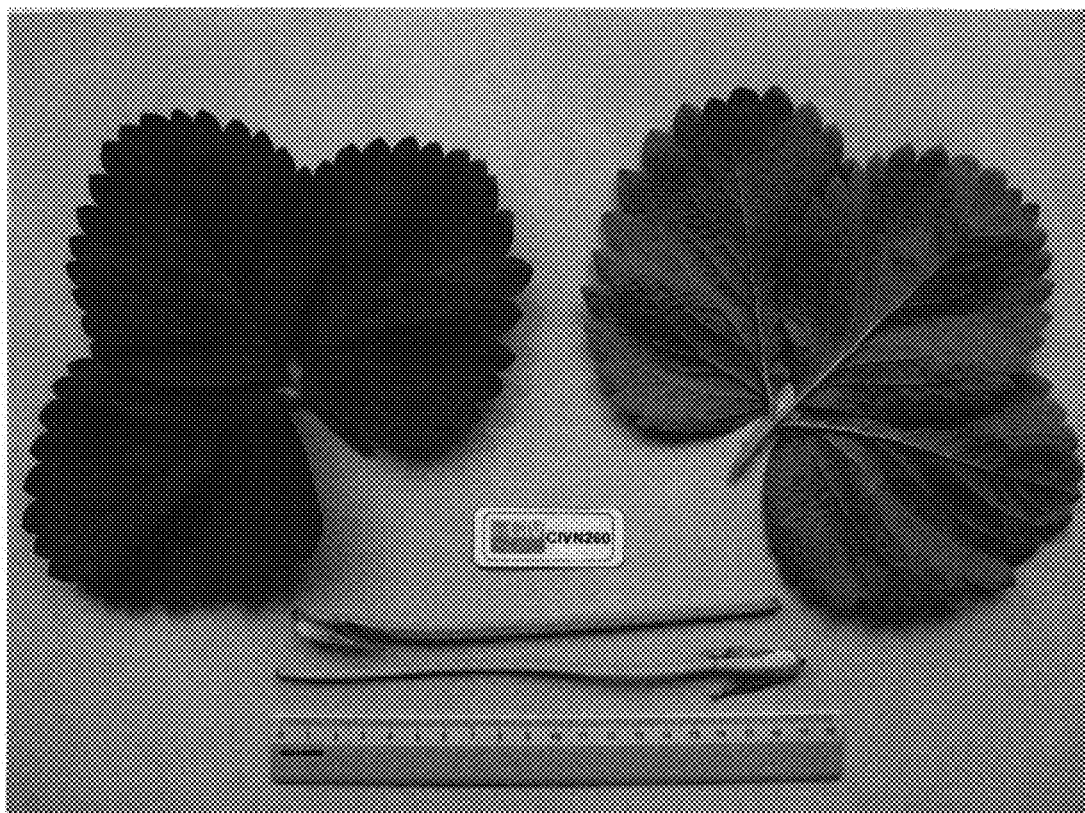


FIG. 3

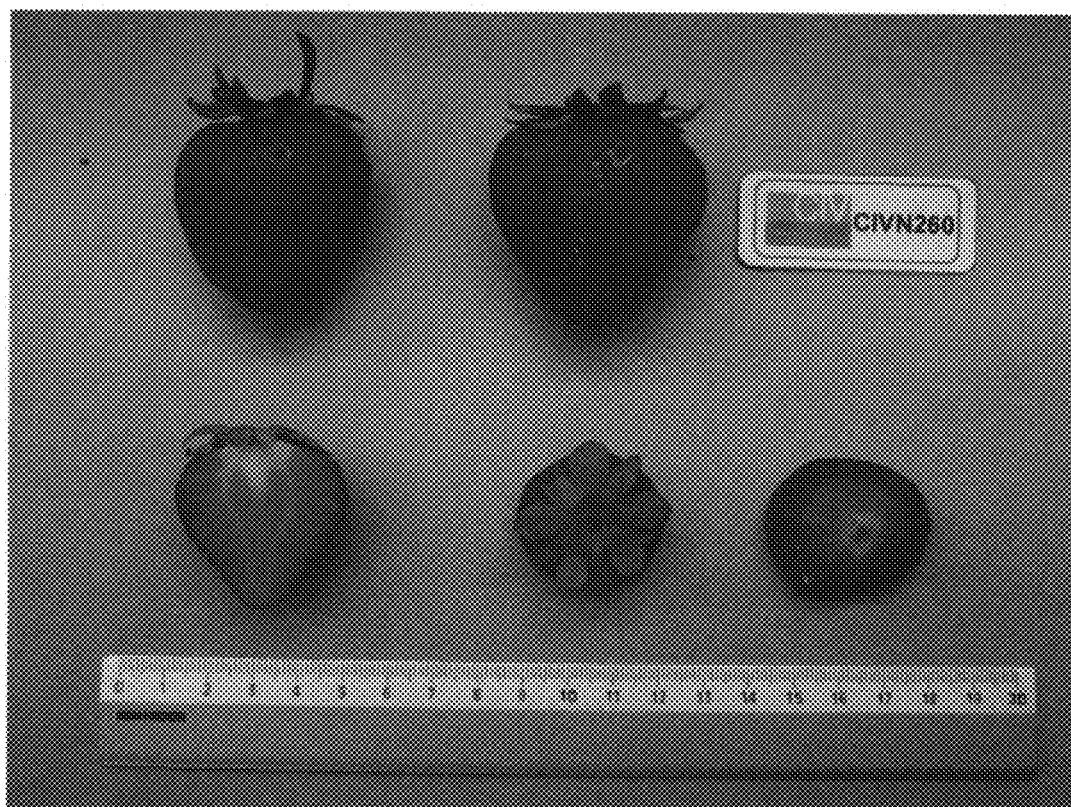


FIG. 4

