



US00PP24490P3

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

(10) **Patent No.:** **US PP24,490 P3**  
(45) **Date of Patent:** **May 27, 2014**

(54) **PEACH TREE NAMED 'FLATOP'**

(50) Latin Name: *Prunus persica* L. Batsch  
Varietal Denomination: **FLATOP**

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(73) Assignee: **Agro Selections Fruits**, Elne (FR)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 140 days.

(21) Appl. No.: **13/385,651**

(22) Filed: **Feb. 29, 2012**

(65) **Prior Publication Data**

US 2012/0227146 P1 Sep. 6, 2012

(30) **Foreign Application Priority Data**

Mar. 2, 2011 (EP) ..... 2011/0565

(51) **Int. Cl.**  
**A01H 5/00** (2006.01)

(52) **U.S. Cl.**  
USPC ..... **Plt./195**

(58) **Field of Classification Search**

USPC ..... Plt./195

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP17,579 P3 \* 4/2007 Maillard et al. .... Plt./188  
PP21,143 P3 \* 7/2010 Maillard et al. .... Plt./195  
PP21,389 P3 \* 10/2010 Maillard et al. .... Plt./195  
PP22,495 P3 \* 2/2012 Maillard et al. .... Plt./195  
PP22,496 P3 \* 2/2012 Maillard et al. .... Plt./195

\* cited by examiner

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(57) **ABSTRACT**

A new and distinct variety of white flat peach tree, denominated 'FLATOP', has fruits of very long shelf life without alteration before and after harvesting, and with a semi-sweet white flesh of high eating quality, with a slightly red pigmentation, and an attractive luminous red skin, with an orange red background. Fruits can be consumed crunchy or melting.

**4 Drawing Sheets**

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Botanical classification: *Prunus persica* L. Batsch.

Variety denomination: 'FLATOP'.

This application claims priority of Community plant variety right No. 2011/0565 filed on Mar. 2, 2011, which is hereby incorporated by reference in its entirety.

#### BACKGROUND OF THE NEW VARIETY

The present invention relates to a new and distinct variety of white flat peach tree, *Prunus persica* L. Batsch, which has been given the variety denomination 'FLATOP'. This new tree produces fruit with a long shelf life without alteration both on the tree after growth completion and after harvesting, very good eating quality, clingstone or semi-clingstone white flesh fruit for fresh market in August in the Pyrénées-Orientales department, France. Contrast is made to 'Flatpretty' (Plant Pat. No. 21,389), a white flat peach tree and to 'ASFPBF0796' (U.S. Plant Pat. No 22,495), a white flat peach tree, and to its parents, 'Nectarmagie' (U.S. Plant Pat. No. 17,579) white nectarine tree and 'ASFPBF0492' (U.S. Plant Pat. No. 21,143) white flat peach tree, for reliable description. 'FLATOP' is a promising candidate for commercial success in that it has very attractive fruits with very long shelf life without alteration before after harvesting.

#### ORIGIN OF THE VARIETY

The 'FLATOP' white flat peach tree originated in a cultivated area of the south of France, in the Pyrénées-Orientales department, where it was tested.

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This place is under a Mediterranean climate (a temperate area), on the Mediterranean coastline. Winters are gentle and summers warm and dry. The amount of days with temperatures below 7° Celsius can vary between 600 and 1200 hours per year. The place is sunny, with 2400 to 2800 hours of sunny days per year on average. The prevailing wind is called 'Tramontane': it dries the air, clears the sky from clouds, but its intensity can be strong and affect the harvest, fruit quantity and/or quality. Marine moisture does not affect the place. Precipitations are irregular through the year and from one year to another. The amount of rainy days does not exceed 80 days per year, and are mostly found in Spring and Autumn. In May and October, very intense precipitations occasionally happen. Summer is dry with a few thunderstorms.

The 'FLATOP' variety resulted from a pollinated cross between the 'Nectarmagie' (U.S. Plant Pat. No. 17,579) white nectarine tree, which was used as the seed parent, and the 'ASFPBF0492' (U.S. Plant Pat. No. 21,143) white flat peach tree, which was used as the pollen parent. 'FLATOP' was provisionally designated, tested and genetically identified by a genetic profile, under number 01.29E.42 PBPL ASF 0797 and was registered at the Official Catalogue of the Agriculture Ministry of the French Republic on Nov. 23, 2010 under number 4047126. The 'FLATOP' variety was obtained by hybridizing and propagated by grafting on a 'Franc Inra Montclar' (not patented) rootstock. It has been determined to have unique tree and fruit characteristics making it worthy for commercial fresh fruit production. There are no known effects of the standard rootstock trees set forth above on the scion cultivar. Asexually propagated plants remained true to the original tree and all characteristics of the tree and the fruit

were transmitted. The plant was reproduced asexually by us in Les Régales, Route d'Alenya, La Prade de Mousseillous, 66200 ELNE, Pyrénées-Orientales, France. More particularly, the plant was reproduced by grafting.

#### SUMMARY OF THE VARIETY

The new and distinct variety of white flat peach tree blooms at the end of February or early in March in the Pyrénées-Orientales department, France. More particularly, it blooms between February 22<sup>nd</sup> and March 17<sup>th</sup>, generally 2 or 3 days earlier than 'Flatpretty' (U.S. Plant Pat. No. 21,389) and together with 'ASFPBF0796' (U.S. Plant Pat. No. 22,495).

The first fruit of 'FLATOP' peach tree ripens at the end of July or early in August, generally about 1 week later than 'ASFPBF0796' (U.S. Plant Pat. No. 22,495) and about 3 weeks later than 'Flatpretty' (Plant Pat. No. 21,389). More particularly, 'FLATOP' variety approximately ripens between July 19<sup>th</sup> and August 15<sup>th</sup>. However, it was observed that its early date of maturity seems to be highly dependant on climatic conditions.

#### DESCRIPTION OF THE DRAWINGS

In the accompanying drawing, which are as nearly true as it is reasonably possible to make in a color illustration of this type:

FIG. 1 is a color photograph, which shows a view of a tree of the new variety in orchard, bearing fruits.

FIG. 2 is a color photograph, which shows two whole fruits and leaves of the new variety, and a three fruits, cut in half, with the stone left in two of the halves for depicting the fruit flesh and the stone of the new variety.

FIG. 3 is a color photograph with reverse and side views of flowers of the new variety, and, with petals removed, reproductive organs of the new variety.

FIG. 4 is a color photograph, which shows different views of the stone.

Due to chemical development, processing and printing, the leaves and fruit depicted in these photographs may or may not be accurate when compared to the actual botanical specimen.

#### DETAILED BOTANICAL DESCRIPTION

The tree, flowers, and fruit may vary in slight detail due to variations in soil type, cultural practices, and climatic condition. The potential for commercial production of fresh fruit by 'FLATOP' is high, due to fruit very long shelf life without alteration after harvesting.

Trees are vigorous and large stature half-standing in a semi-spread to semi-upright out aspect. The anthocyanic coloration of flowering shoot is present excluding brushwood side away from sun. The time of beginning of flowering is considered medium; flowering begins at the end of February or during March. The type of flower is showy with medium to large petal size. Petals are medium pink. Leaf glands are present and reniform. The fruit flesh is considered white, or cream white, with a slightly red pigmentation into the stone cavity and around this cavity. The fruit skin is very thick and colored with a luminous red blush on a red orange background. The stone is small to medium size. Fruit taste is semi-sweet, very aromatic and with a high level of sugars.

Compared to 'Flatpretty' (Plant Pat. No. 21,389) peach tree, 'FLATOP' variety blooms broadly 2 or 3 days earlier but ripens approximately 3 weeks later than 'Flatpretty', as set forth above. 'FLATOP' variety produces fruits having a better

presentation than 'Flatpretty' fruits, round and regular shaped, and with more intense skin coloration. Also, 'FLATOP' variety shows a closed pistil cavity compared to 'Flatpretty'.

Compared to 'ASFPBF0796' (U.S. Plant Pat. No. 22,495) white flat peach tree, 'FLATOP' variety blooms approximately at the same time with 'ASFPBF0796', but ripens approximately 1 week later.

The new variety female parent, which is 'Nectarmagie' (U.S. Plant Pat. No. 17,579), produces white nectarines. 'Nectarmagie' has approximately the same time of blooming with 'FLATOP' and ripens early in July. It was chosen as a genitor because of its high level of productivity and its very attractive fruits presentation, round-shaped and firm. Moreover, 'Nectarmagie' fruits are homogenous in size and have a semi sweet and very aromatic taste, with a high level of sugar. 'Nectarmagie' fruits can be consumed crunchy or melting.

The new variety male parent, which is the 'ASFPBF0492' (U.S. Plant Pat. No. 21,143), produces, at the end of July, white flat peaches with a good presentation, homogeneous in size. 'ASFPBF0492' fruits show an attractive coloration, pink red on a pink cream background, and their flesh is firm with a semi-sweet, very aromatic flavour, with a high level of sugar. Said flesh is very tasty when eaten crunchy or melting.

#### DETAILED DESCRIPTION

Referring more specifically to the pomological details of this new and distinct variety of white flat peach tree, the following was observed on trees in their third growing season (second year of production) under the ecological conditions prevailing at the orchards located near the town of Elne, Pyrénées-Orientales department, France. All observations have been done on rootstock cultivars. Used rootstocks were 'Franc Inra Montclar' (not patented) trees. All major color code designations are by reference to The R.H.S. Color Chart (Fourth Edition) provided by The Royal Horticultural Society of Great Britain.

#### TREE

##### Size:

*Generally.*—Considered large. The tree size the first year was approximately 250 cm. The tree was pruned during each following dormant season to a height of approximately 250 cm. Current season shoots growth could reach 60 to 80 cm. The tree size from the second year (second and next years) reached a final height of 310 to 330 cm with current season shoots length comprised. The tree size is consistently reduced to 250 cm the next years.

*Spread:* Approximately 100 cm with a cylindrical shape. The whole orchard was oriented to a central leader organization, with tree lines spaced of 4.0 meters and trees spaced of 1.0 meter in a same tree line. As a result, tree spread was about 100 cm and the orchard contained 2500 trees by hectare.

*Vigor:* Considered vigorous.

*Productivity:* Very Productive and regular, every year. Fruit set is spaced by thinning to develop the remaining fruit into the desired market sized fruit. The number of the fruit set varies with the prevailing climatic conditions and cultural practices employed during the bloom period, and is therefore not distinctive of the present variety. A reduce vegetation, obtained with pruning or green pruning, approximately 1 month or 1 month ½ before harvesting the flat

fruits, significantly promotes fruit qualities, especially growth, color and firmness. Moreover, contamination risks due to monilia or rot are significantly reduced. 'FLATOP' variety is not much sensitive to cracking of pistil cavity, to cork formation into peduncle cavity or to monilia.

Bearer: Very regular. Thinning of 1 fruit out of 3 or more was necessary for the tree valorisation. Thinning was necessary every year during the years of observation.

Form: The 'FLATOP' variety has a naturally semi-spread to semi-upright shape.

Density: Considered dense.

Hardiness: The present tree was grown and evaluated in France. Experimentations on different sites with winter chilling requirement comprised between 350 hours and 1200 hours showed a good behaviour of the tree in all cases. Traditionally, flat fruits are more sensitive to low temperatures and climatic variations, because of the flower morphology in which the ovule is less protected. Thus, areas not much exposed to frost are recommended for flat peach trees growth.

#### TRUNK

Diameter: Approximately between 7.5 cm and 9.0 cm in diameter when measured at a distance of approximately 20 cm above the soil level.

Bark texture: Considered rough, with lenticels.

Lenticels: Numerous lenticels are present, generally between 4 and 5 lenticels per cm<sup>2</sup>. The lenticels range in size from approximately 3.0 millimeters to 5.0 millimeters in width, and from 1.5 to 2.0 millimeters in height.

Lenticel color: The outside of lenticels has a silver-grey color (RHS Grey 201 C), whereas the inside is considered brown (RHS Greyed Orange 165 B to 165 C).

Bark coloration: The bark has a silver-grey color (RHS Grey 201 A to 201 B or RHS N200 B to 200C), slightly deeper than lenticel color.

#### BRANCHES

Size: Mature branches and current season shoots are considered medium for the variety, Mature branches are pruned to a length of about 50.0 centimeters.

Diameter: Average as compared to other peach varieties. The current season shoots have a diameter from 4.0 to 6.0 millimeters, and mature branches have a diameter from 20.0 to 30.0 millimeters.

Surface texture: Average, wood which is several years old has no furrowed appearance.

Crotch angles: Primary branches are considered variable, but the crotch angles are generally between 50 degrees and 70 degrees from the horizontal axis. This particular characteristic is not considered distinctive of the variety, however.

Current season shoots:

*Surface texture.*—Substantially glabrous.

Internode length: Generally 20.0 millimeters to 30.0 millimeters.

Color of mature branches: Brown (RHS Grey Brown 199 A to 199 B).

Current seasons shoots:

*Color.*—The color of new shoot tips is considered a light yellow-green (RHS Yellow Green 144 A to 144 B) on lower part of new shoot tips, whereas the upper part is colored brown-purple (RHS Greyed Purple 187 A to

187 B) to red-brown (RHS Greyed Red 182 A), depending both on the position on shoots and the sunlight exposure.

#### LEAVES

Size: Considered medium to large for the species. The ratio leaf length/leaf width is 3.77.

Leaf length: Approximately 148.0 to 180.0 millimeters with leaf petiole. The medium length is 163.0 millimeters.

Leaf width: Approximately 39.0 to 50.0 millimeters. The medium width is 43.0 millimeters.

Leaf base shape: Concave.

Leaf form: Lanceolate.

Leaf tip form: Acuminate.

Leaf color:

*Upper leaf surface.*—Dark Green (RHS Green 137 A).

*Lower surface.*—A lighter green (RHS Green 137 B to 137 C) than the upper leaf surface color.

Leaf texture: Smooth.

Leaf venation: Pinnately veined.

Mid-vein:

*Color.*—Light green, almost cream yellow (RHS Yellow Green 145 D).

Leaf margins: Slightly undulating.

Form: Considered slightly dentate.

Uniformity: Leaves are isolated or grouped by 2 or 3. In this last case, one leaf of normal size is found with one or two smaller leaves (at least 50% smaller).

Leaf petioles:

*Size.*—Considered medium.

*Length.*—Between 10.0 and 14.0 millimeters.

*Diameter.*—About 1.5 to 2.0 millimeters.

Petioles color:

*Upper petiole surface.*—Light green, almost yellow (RHS Yellow Green 144 B to 144 C).

*Lower surface.*—Light green, almost yellow (RHS Yellow Green 144 D).

Leaf glands:

*Size.*—Considered medium. Their length is approximately 2.0 millimeters and their width is about 1.0 millimeter.

*Number.*—Generally between 2 and 4 glands per leaf.

*Type.*—Reniform.

*Color.*—On young leaves, leaf gland color is considered a light green (RHS Green 145 B). On older leaves, leaf gland color turns to a dark brown (RHS Grey Brown 199 A to 199 B).

Leaf stipules:

*Generally.*—No leaf stipules were observed. But as seen in the characteristic relative to the leaves uniformity, it is possible to find leaves by groups of 2 or 3, with a normal-size leaf and smaller ones.

#### FLOWERS

Flower buds:

*Generally.*—At pre-floral stage of development, the floral buds are conic in form with a round tip. Their form is evolving until blooming, with variable dimensions. Just before blooming, floral buds are approximately 10.0 millimeters wide and approximately 18.0 millimeters long.

*Color.*—This characteristic is dependent upon the proximity to bloom. At pre-floral stage of development, the bottom of the flowers buds, formed by the sepals,

is of purple-brown color (RHS Greyed Purple 183 A to 183 B or Grey Brown 199 A); the corolla, formed by the petals, is generally of medium pink color (RHS Red Purple 65 B or 69 C). Petals color shows an evolution until the end of flowering.

**Hardiness:** The buds are considered hardy under typical central Pyrénées-Orientales department climatic conditions. No winter injury was noted during the last several years of evaluation in the central Pyrénées-Orientales department, with winter temperatures as low as -10 degrees Celsius in January. The current variety has not been intentionally subjected to drought or heat stress, but the variety showed a very good resistance in orchard to temperatures up to 42 degrees Celsius with an average temperature between 28 and 30 degrees Celsius during 3 weeks in summer.

**Date of bloom:** Generally at the end of February or early in March. The first bloom was observed on Mar. 5, 2003.

**Blooming time:** Considered medium-season in relative comparison to other commercial peach cultivars grown in the Pyrénées-Orientales department, France. The date of full bloom is observed in March, at the middle of the blooming period. The date of bloom varies slightly with climatic conditions and cultural practices. Thus the first full bloom was observed on Mar. 5, 2003. Last observed blooming times were Feb. 22, 2008, then Mar. 3, 2009, then Mar. 17, 2010, then Feb. 25, 2011.

**Duration of bloom:** Between 9 and 12 days. This characteristic varies slightly with the prevailing climatic conditions.

**Flower type:** The variety is considered to have a showy type flower.

**Flower size:** Considered medium to large. Flower diameter at full bloom is approximately 36.0 to 43.0 millimeters.

**Bloom quantity:** Considered abundant, approximately 45 flowers per meter.

**Flower bud frequency:** Generally 2 flower buds appear per node, occasionally 1.

**Petal size:**

*Generally.*—Considered medium to large for the species.

*Length.*—Generally about 22.0 millimeters.

*Width.*—Generally about 20.0 millimeters.

**Petal form:** Round-shaped.

**Petal count:** Generally 5.

**Petal texture:** Smooth and sweet.

**Petal color:** Generally, both surfaces of petals are colored in a medium Pink (RHS Red Purple 65 B to 65 C) and slightly darker at the end of flowering.

**Fragrance:** Sweet.

**Petal claw:**

*Form.*—The claw is considered to have a truncated form.

*Length.*—Approximately 1.5 to 1.6 millimeters.

*Width.*—Approximately 1.1 to 1.3 millimeters.

*Color.*—A darker pink than the petal color.

**Petal margins:** Slightly wavy, sinuate.

**Petal apex:**

*Generally.*—The petal apices are generally wide dome-shaped.

**Flower pedicel:**

*Length.*—Considered medium to long and having an average length of approximately 3.0 millimeters.

*Diameter.*—Considered average, approximately 1.5 millimeters.

*Color.*—A brown to light brown (RHS Grey Brown N 199 C to N 199 D).

**Calyx:**

*Internal surface texture.*—Smooth and glabrous.

*Color.*—Generally, both surfaces of sepals are colored in a matt Red (RHS Greyed Purple 183 A to 183 D). Nevertheless, the inner surface of the calyx may be in a green yellow (RHS Yellow 13 A to 13 B or RHS Yellow Green 150 A to 150 B) color, whereas the outer surface of the calyx is considered of purple-brown (RHS Greyed Purple 183 A to 183 D) color.

**Sepals:**

*Number.*—Generally 5.

*Surface texture.*—The outer surface has a short, fine pubescent texture.

*Size.*—Average.

*Length.*—Approximately 6.0 millimeters.

*Width.*—Approximately 4.0 millimeters.

*Form.*—Ovate.

*Color.*—Generally, both surfaces of sepals are colored in a matte Red (RHS Greyed Purple 183 A to 183 D).

*Margins.*—Smooth.

*Apex.*—The apex is round-shaped to emarginated.

**Average number of stamens per flower:** Approximately 45 stamens per flower.

**Anthers:**

*Generally.*—Medium in length.

*Color.*—Red to orange-yellow color (RHS Yellow Orange 16 A to 16 B). The color becomes brown (RHS Greyed Red 178 A) after time maturity.

**Pollen production:** Pollen is abundant, and has a yellow color (RHS Yellow Orange 17 B to 17 C) which may evolve with maturity. The present variety is considered auto-fertile (self-pollinating).

**Filaments:**

*Size.*—Medium length, between 11.0 and 18.0 millimeters in length. Filaments length is generally longer than pistil's length.

*Color.*—Considered light pink (approximately RHS Red Purple 62 C to 62 D or RHS Red Purple 73 A to 73 B). The color evolves during the blooming.

**Pistil:**

*Number.*—Usually 1.

*Generally.*—Average in size.

*Length.*—Approximately 14.0 to 16.0 millimeters including the ovary, which has a size of approximately 1.0 to 1.5 millimeters. Generally, pistil's length is equal to or higher than filaments length, sometimes slightly smaller.

*Color.*—Considered a very pale green (RHS Yellow Green 150 D or RHS Yellow Green 151 D). The color evolves during the blooming.

*Surface texture.*—Pubescent.

## FRUIT

**Maturity when described:** Very firm ripe condition (shipping ripe).

**Date of first picking:** Aug. 3, 2003.

**Date of last picking:** The date of harvest varies slightly with the prevailing climatic conditions. The 'FLATOP' variety has a grouped maturity. The maturity is grouped within 9 to 11 days and the harvest is generally performed in two runs. Last known picking times begin Jul. 22, 2007; then Jul. 22, 2008; then Aug. 6, 2009; then Aug. 15, 2010; then Jul. 19, 2011.

## Size:

*Generally*.—Homogeneous in size.

Average cheek diameter: Approximately 68.0 to 76.0 millimeters.

Average axial diameter: Approximately 37.0 to 45.0 millimeters. 5

Typical weight: Generally between 120.0 and 180.0 grams. This characteristic is highly dependent upon the prevailing cultural practices, and therefore is not particularly distinctive of the variety. 10

## Fruit form:

*Generally*.—Oblate and round to slightly cardioid, with few bump. The fruit is generally uniform in symmetry, viewed from the suture's plane.

Fruit suture: Wide-mouthed and slightly marked, extending from the base to the apex. No apparent callousing or stitching exists along the suture line. Not pointed. 15

## Suture:

*Color*.—The suture has generally a color similar to the whole fruit color. The suture is colored with a luminous red (RHS Greyed Purple 183 A to 183 B) on an orange red background (RHS Orange Group 27 C to 27 D). 20

## Ventral surface:

*Form*.—Smooth and round.

Apex: Slightly depressed.

Base: Semi-flared, shallow.

Stem cavity: Average depth of the stem cavity is about 8.0 to 10.0 millimeters. Average width is about 12.0 to 18.0 millimeters. 30

## Fruit skin:

*Thickness*.—Considered very thick and strong, and the adherence of skin to flesh is strong.

*Texture*.—Smooth.

*Taste*.—Semi-sweet, aromatic, with a high level of sugars.

*Tendency to crack*.—None observed.

## Color:

*Blush color*.—This blush color is a luminous red (RHS Greyed Purple 183 A to 183 B) covering 75 to 90% of the skin, with an orange red background (RHS Orange Group 27 C to 27 D). The percentage of the blush on the fruit skin surface can vary, and is generally dependant upon the prevailing conditions under which the fruit was grown.

*Ground color*.—The ground color covers 10 to 25% of the fruit skin surface, and is considered orange red (RHS Orange Group 27 C to 27 D). 40

Fruit stem: Medium in length, approximately 5.0 to 6.0 millimeters.

Diameter: Approximately 4.0 millimeters.

Color: Pale green (RHS Yellow Green 145 A to 145 B).

## Flesh:

*Ripens*.—Very evenly, homogenously, slowly.

*Texture*.—Very firm, very dense, crunchy, melting, juicy at harvest maturity stage.

*Fibers*.—Not fibrous.

*Aroma*.—Pronounced.

*Eating quality*.—Considered very good, with a high level of sugars.

*Flavor*.—Considered semi-sweet and aromatic. The Brix is generally superior to 13 degrees and acidity comprised between 6 and 9 meq/100 ml. 65

*Juice*.—Very juicy at complete maturity.

*Brix*.—Generally superior to 13.0 degrees. This characteristic varies slightly with the number of fruit per tree; prevailing cultural practices; and the surrounding climatic conditions.

*Flesh color*.—White flesh (RHS White 155 C to 155 D) generally with a slightly red pigmentation (RHS Red 53 B to 53 C) into the stone cavity and slightly around the stone cavity.

## STONE

Type: Clingstone to semi-clingstone depending on the fruit maturity.

Size: Considered small to medium for the variety. The stone size varies significantly depending upon the tree vigor, crop load and prevailing growing conditions. 15

Length: Approximately 20.0 to 22.0 millimeters.

Width: Approximately 20.0 to 21.0 millimeters.

Diameter: Approximately 12.0 to 13.0 millimeters.

Form: Oblate, semi-round.

Base: Generally straight.

## Apex:

*Shape*.—The stone apex is oblate, with a slight edge.

Stone cavity: Considered medium to small size, oblate-shaped, and its dimensions corresponding to the stone's dimensions. 25

## Stone surface:

*Surface texture*.—The pit is transversely furrowed on its entire surface. Furrows are shallow with a dorsal groove and a triple ventral groove.

*Ridges*.—The surface texture is generally characterized by more prominent ridges along the ventral edges and less prominent ridges at the apical tip.

## Ventral edge:

*Width*.—Considered small to medium, and having a dimension of approximately 2.0 millimeters at mid-suture.

## Dorsal edge:

*Shape*.—Grooved.

Stone color: The color of the dry stone is generally considered purple brown (RHS Greyed Purple 187 A to 187 B or RHS Greyed Orange 176 B to 176 C) with edges considered orange brown (RHS Greyed Orange 174 B to 174 C). 40

Tendency to split: Splitting is absent or very weak, depending on climatic conditions between blooming period and stone hardening. 45

## Kernel:

*Size*.—The kernel size is considered small.

*Length*.—Approximately 7.0 millimeters.

*Width*.—Approximately 7.0 millimeters.

*Form*.—Considered elliptic and oblate, sometimes double.

*Pellicle*.—Very slightly Pubescent.

*Color*.—The kernel skin is an orange brown (RHS Greyed Orange N 164 A to 164 B or RHS Greyed Orange 165 B). The almond, which is the seed of the kernel, is cream-white (RHS Orange White 155 D). The kernel and its embryo are mature at the time of fruit maturity. 55

Use: The subject variety 'FLATOP is considered to be a white flat peach tree with a medium or late season maturity, and which produces fruits that are considered firm, attractively and luminously colored. Fruits have a semi-sweet taste and are excellent for uncooked consumption, crunchy or melting and juicy when at full maturity. Fruits have excellent 65

gustative qualities. In particular, 'FLATOP' fruits are very easy to eat, with their doughnut shape, notably for children. Moreover, the non pointed stone shape is reassuring, especially for parents, and thus, there is no need to cut the fruit before eating. Due to their flesh quality and firmness, they can also be commercialized as 4<sup>th</sup> range product (packed fruit or fruit in bags for example). And they are also useful for both local and very long distance shipping.

Keeping quality: Remarkable. Fruits have a slow maturation and a long shelf life both on the tree after growth completion and after harvesting without alteration. After harvest, fruits are well preserved more than 3 weeks at 2.0 degree Celsius.

Shipping quality: Considered very good. The fruit of the new white flat peach variety showed minimal bruising of the flesh or skin damage after being subjected to normal harvesting and packing procedures. Its resistance to handling during harvest and packing and its long shelf life without alteration after harvest easily permit at least 3 weeks-shipping at 2 degrees Celsius.

Resistance to insects and disease: No particular susceptibilities were noted. The present variety is not very sensitive to powdery mildew, or conservation diseases and decay due to its thick and strong skin.

Although the new variety of peach tree possesses the described characteristics when grown under the ecological conditions prevailing near Elne, Pyrénées-Orientales department, France, it should be understood that variations of the usual magnitude and characteristics incident to changes in growing conditions, fertilization, pruning, pest control and horticultural management are to be expected.

We claim:

1. A new and distinct variety of white flat peach tree as illustrated and described, characterized by fruits of very long shelf life without alteration before and after harvesting, and with a semi-sweet white flesh of high eating quality, with a slightly red pigmentation, and an attractive luminous red skin, with an orange red background.

\* \* \* \* \*

FIG. 1



FIG. 2

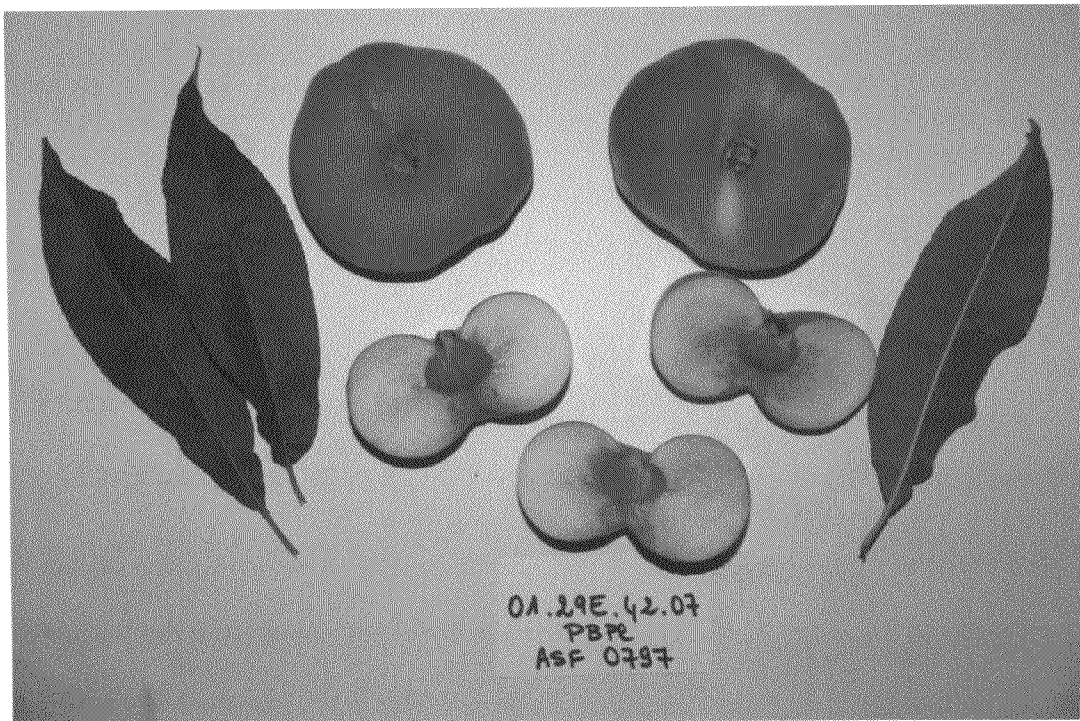




FIG. 3



FIG. 4



UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : PP24,490 P3  
APPLICATION NO. : 13/385651  
DATED : May 27, 2014  
INVENTOR(S) : Arsene Maillard et al.

Page 1 of 1

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 (30)**

Change

“Mar. 2, 2011 (EP) ..... 2011/0565”

to be

--Mar. 2, 2011 (QZ) ..... 2011/0565--

Signed and Sealed this  
Seventeenth Day of March, 2015



Michelle K. Lee  
*Director of the United States Patent and Trademark Office*