



US00PP36588P3

(12) **United States Plant Patent**  
**Pressler**

(10) **Patent No.:** **US PP36,588 P3**

(45) **Date of Patent:** **Apr. 8, 2025**

(54) **MANDARIN TREE NAMED ‘AC4916’**

(50) Latin Name: *Citrus reticulata*  
Varietal Denomination: **AC4916**

(71) Applicant: **C&B Pressler Family Trust,**  
Bundaberg (AU)

(72) Inventor: **Craig Robert Pressler,** Bundaberg  
(AU)

(73) Assignee: **C&B Pressler Family Trust,**  
Bundaberg (AU)

(\* ) 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.: **18/771,592**

(22) Filed: **Jul. 12, 2024**

(65) **Prior Publication Data**

US 2025/0031589 P1 Jan. 23, 2025

**Related U.S. Application Data**

(60) Provisional application No. 63/514,075, filed on Jul.  
17, 2023.

(51) **Int. Cl.**  
*A01H 5/08* (2018.01)  
*A01H 6/78* (2018.01)

(52) **U.S. Cl.**  
USPC ..... **Plt./202**  
CPC ..... *A01H 6/785* (2018.05)

(58) **Field of Classification Search**  
USPC ..... Plt./202  
CPC ..... *A01H 6/785*; *A01H 5/08*  
See application file for complete search history.

Primary Examiner — Keith O. Robinson

(74) *Attorney, Agent, or Firm* — Michelle Bos Legal LLC

(57) **ABSTRACT**

A new mandarin tree named ‘AC4916’ notable for its  
flavorful seedless fruit.

**6 Drawing Sheets**

**1**

Latin name: *Citrus reticulata*.  
Common name: Mandarin.  
Variety denomination: ‘AC4916’.

**BACKGROUND AND SUMMARY OF THE  
VARIETY**

‘AC4916’ is a new mandarin tree that originated as an  
induced mutation of ‘W Murcott’ mandarin (not patented) at  
Queensland, Australia in 2009. Bud sticks of ‘W. Murcott’  
(not patented) were irradiated in 2009, and subsequently  
grafted onto ‘Carrizo’ rootstock (not patented) at Queens-  
land, Australia in 2009. ‘AC4916’ was selected from among  
the grafted plants for further observation because of its  
flavorful seedless fruit. The ‘AC4916’ mandarin tree has  
been observed to remain true to type over successive asexu-  
ally propagated generations.

The ‘AC4916’ mandarin tree is distinguished from ‘W.  
Murcott’ as set forth in Table 1 below.

**TABLE 1**

Comparison of ‘AC4916’ to ‘W. Murcott’		
	‘AC4916’	‘W. Murcott’
Seeds	Absent	Present
Rind thickness	3.0 mm	3.8 mm
Leaf upper surface color	Yellow-green 147A	Yellow-green 146A
Leaf shape in cross-section	Weakly concave, 120°	Strongly concave, 60°

The ‘AC4916’ mandarin tree is distinguished from similar  
variety ‘Tango’ (U.S. Plant Pat. No. 17,863) as set forth in  
Table 2 below.

**2**

**TABLE 2**

Comparison of ‘AC4916’ Mandarin to ‘Tango’ Mandarin		
	‘AC4916’	‘Tango’
Growth habit	Spreading	Upright
Vigor	Strong	Strong to very strong
Fruit rind color	Orange N25B	Orange 24A
Fruit length	60.5 mm	54.7 mm

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

The accompanying photographs, which show fifth- and  
sixthleaf ‘AC4916’ mandarin trees grown on ‘Carrizo’ root-  
stock, were taken in 2023 and 2024 at Visalia, California.  
The trees were planted in 2019. The colors of the claimed  
plant and its fruit may vary with lighting conditions. There-  
fore, color characteristics should be determined with refer-  
ence to the observations described herein, rather than from  
these illustrations alone.

FIG. 1 shows sectioned fruit from an ‘AC4916’ mandarin  
tree;

FIG. 2 shows a shoot from an ‘AC4916’ mandarin tree;  
FIG. 3 shows leaves from an ‘AC4916’ mandarin tree;  
FIG. 4 shows the trunk of an ‘AC4916’ mandarin tree;  
FIG. 5 shows an ‘AC4916’ mandarin tree; and,  
FIG. 6 shows flowers of an ‘AC4916’ mandarin tree.

**DETAILED BOTANICAL DESCRIPTION**

The following detailed botanical description is based on  
observations recorded at Visalia, California in 2023 of  
fifth-leaf trees planted in 2019 on ‘Carrizo’ rootstock. The  
characteristics described will vary somewhat depending

upon cultural practices, climatic conditions, location and growing season. Quantified measurements are expressed as an average of measurements taken from a number of individual plants of the claimed variety. The measurements of any individual plant or any group of plants of the variety may vary from the stated average. Colors are described with reference to The R.H.S. Colour Chart, 6th edition (Royal Horticultural Society 2019).

#### DETAILED BOTANICAL DESCRIPTION

##### Tree:

*Vigor*.—Medium strong.  
*Density of canopy*.—Medium dense.  
*Habit*.—Spreading.  
*Height*.—3 m.  
*Trunk diameter (at 30 cm above the graft)*.—7 cm to 10 cm.  
*Bark texture*.—Slightly rough.  
*Bark color*.—Grey-brown 199B.

##### Branch (fruiting branches about 1 m above graft):

*Length*.—About 1.5 m.  
*Diameter*.—2 cm to 3 cm.  
*Crotch angle*.—Acute.  
*Bark color*.—Grey-brown 199B.  
*Bark texture*.—Slightly rough.  
*Thorns*.—Absent.  
*Current year shoot length*.—70 cm to 72 cm.  
*Current year shoot color*.—Green NN137B.

##### Flower buds:

*Shape*.—Oval.  
*Length*.—0.9 cm.  
*Diameter*.—0.5 cm.  
*Bud color*.—White NN155D.

##### Flowers:

*Date of first bloom*.—Mar. 27, 2024.  
*Number of flowers per cluster*.—1 to 4.  
*Number of petals per flower*.—5.  
*Flower diameter*.—2.8 cm.  
*Flower depth*.—1.1 cm.

##### Petals:

*Shape*.—Strap.  
*Apex*.—Rounded.  
*Margin*.—Entire.  
*Length*.—1.3 cm.  
*Width*.—0.3 cm.  
*Color—upper surface*.—White 155D.  
*Color—lower surface*.—155B.  
*Relative position of petal margins*.—Overlapping.

##### Pistil:

*Quantity per flower*.—1.  
*Length*.—7.4 mm.

##### Stigma:

*Length*.—1 mm.  
*Stigma color*.—Yellow 13C.

##### Style:

*Length*.—4.6 mm.  
*Color*.—Yellow-green 151D.

##### Ovary:

*Length*.—2 mm.  
*Diameter*.—2.4 mm.  
*Color*.—Yellow-green 145A.

##### Stamens:

*Quantity per flower*.—20.

*Anther length*.—2 mm.  
*Anther color*.—Yellow-orange 14A.  
*Pollen*.—Present in moderate amount.

##### Pedicel:

*Length*.—4 mm.  
*Diameter*.—1 mm.  
*Color*.—Yellow-green N144D.

##### Sepals:

*Length*.—2 mm.  
*Sepal width*.—2 mm.  
*Sepal shape*.—Deltoid with acuminate apex.  
*Sepal margin*.—Entire.  
*Sepal color—upper surface*.—Yellow-green 154C.  
*Sepal color—lower surface*.—Yellow-green 154B.

##### Leaves:

*Length*.—65 mm to 80 mm.  
*Width*.—35 mm to 45 mm.  
*Length/width ratio*.—1.4 to 2.3.  
*Blade margin*.—Broadly crenate.  
*Leaf shape*.—Broadly elliptic.  
*Apex shape*.—Acute.  
*Base shape*.—Rounded.  
*Texture of upper surface*.—Medium-firm, smooth.  
*Color of upper surface*.—Yellow-green 146A.  
*Color of lower surface*.—Yellow-green 146B.  
*Petiole length*.—6 mm to 10 mm.  
*Petiole diameter*.—1 mm to 2 mm.  
*Petiole color*.—Yellow-green N144A.  
*Wings*.—Absent.

##### Fruit:

*Axial diameter*.—74.1 mm.  
*Apical diameter*.—60.5 mm.  
*General shape in profile*.—Oblate.  
*Position of broadest part*.—Middle.  
*Shape in cross-section*.—Round.  
*Presence of neck*.—Absent.  
*Presence of depression at stalk end*.—Present.  
*Presence of areola*.—Absent.  
*Presence of navel*.—Absent.  
*Rind color*.—Orange N25B.  
*Rind thickness*.—3.4 mm.  
*Ease of peeling*.—Easy to medium.  
*Rind texture*.—Smooth to medium.  
*Rind glossiness*.—Strong.  
*Albedo color*.—Yellow 15D.  
*Quantity of fruit segments per fruit*.—9 to 12.  
*Toughness of segment membrane*.—Weak.  
*Juice sac length*.—8 mm to 12 mm.  
*Juice sac shape*.—Elongated.  
*Juice sac color*.—Yellow-orange N21A.  
*Flesh color*.—Orange N25B.  
*Juice soluble solids*.—8.8° Brix.  
*Relative harvest maturity*.—January to May; after ‘Tango’ (U.S. Plant Pat. No. 17,863), a middle to late maturing variety.  
*Parthenocarpy*.—Present.  
*Seeds*.—None.

##### Market use: Fresh.

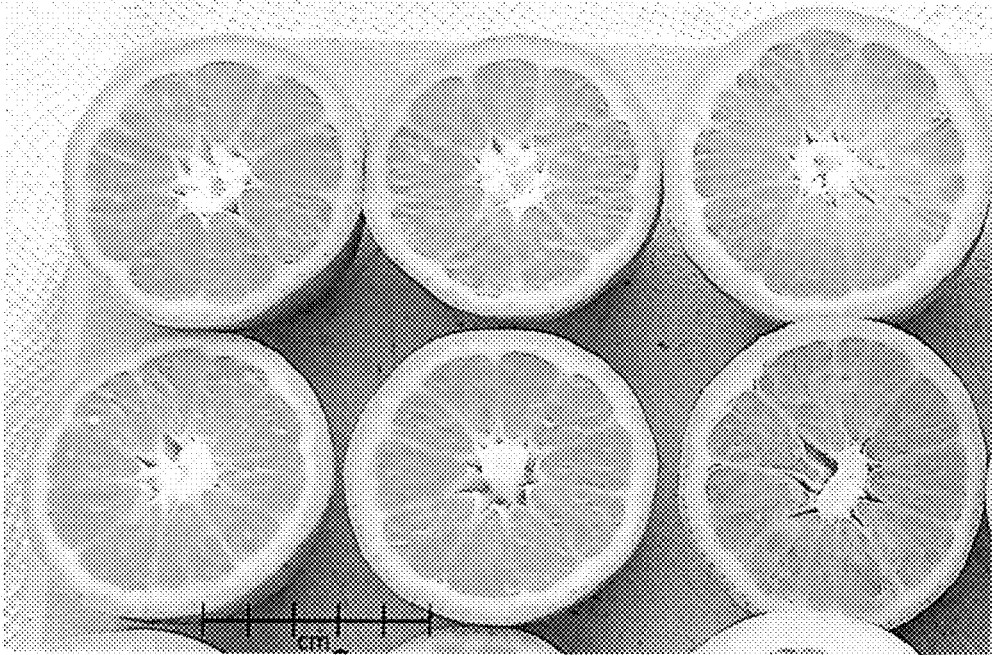
Keeping quality: Excellent.

##### Shipping quality: Excellent.

##### I claim:

1. A new and distinct mandarin tree named ‘AC4916’ substantially as described and illustrated herein.

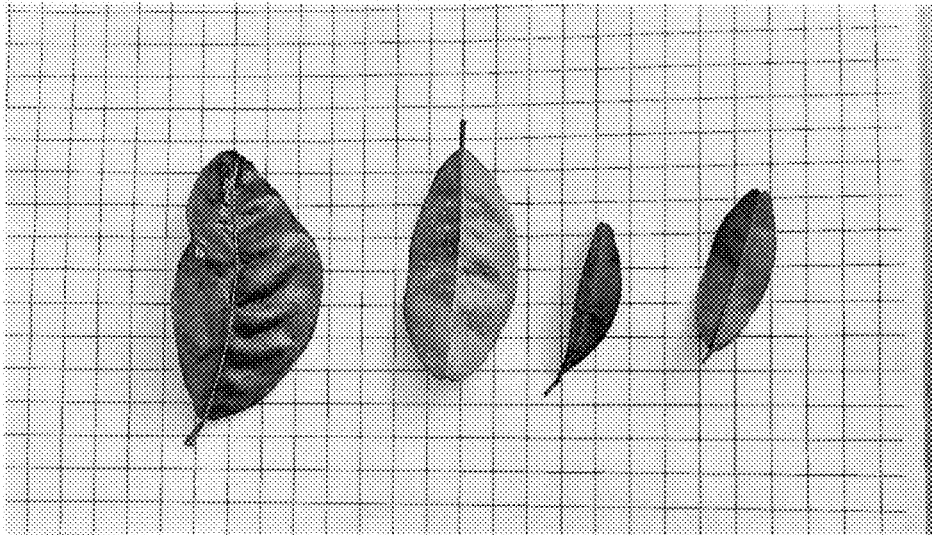
\* \* \* \* \*



**FIG. 1**



**FIG. 2**



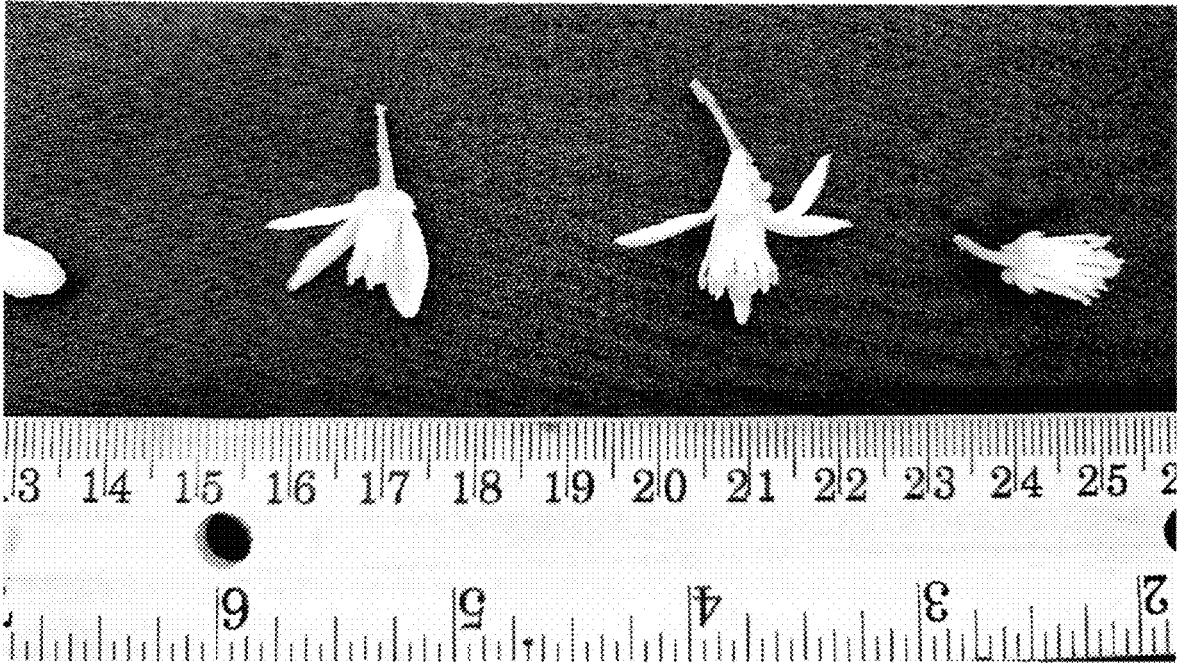
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**