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

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(54) **LEMON TREE NAMED ‘CODE 3X97’**

(50) Latin Name: *Citrus limon*  
Varietal Denomination: **Code 3X97**

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patent is extended or adjusted under 35  
U.S.C. 154(b) by 43 days.

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**A01H 5/08** (2018.01)

(52) **U.S. Cl.**  
USPC ..... **Plt./201**  
CPC ..... **A01H 5/0806** (2013.01)

(58) **Field of Classification Search**  
USPC ..... Plt./201  
See application file for complete search history.

(56) **References Cited**

**PUBLICATIONS**

Plant Varieties Journal, Quarter One, vol. 20, No. 1, pp. 44, 93 and  
244-248, May 16, 2007.\*

\* cited by examiner

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(57) **ABSTRACT**

‘Code 3X97’ is a new and distinct lemon tree notable for its  
high quality seedless fruit.

**3 Drawing Sheets**

**1**

Genus and species: *Citrus limon*.  
Variety denomination: ‘Code 3X97’.

**BACKGROUND AND SUMMARY OF THE  
VARIETY**

The new lemon variety ‘Code 3X97’ originated as an  
induced mutation of ‘Eureka’ lemon (not patented). Gamma  
irradiation from a Gammacell 200 (60C) source was applied  
to bud sticks of ‘Eureka’ in 1998 at Emerald, Queensland,  
Australia. The irradiated bud sticks were budded onto ‘Car-  
rizo’ rootstock (not patented) in 1998 at Bundaberg, Queen-  
sland, Australia, and the trees that survived were field  
planted at Bundaberg in 1999. The selection now known as  
‘Code 3X97’ was identified as showing consistently fewer  
seeds than the parent variety, with no significant reduction in  
fruit size. A comparative trial was planted in 2003, using  
‘Code 3X97’ budwood on ‘Benton’ (not patented) rootstock.  
Successive generations have consistently shown few seeds  
and have reproduced true to type.

‘Code 3X97’ is a new and distinct lemon tree notable for  
its fruit, which produces consistently low numbers of seeds.  
Table 1 shows a comparison of ‘Code 3X97’ lemon to  
‘Eureka’ and other similar (unpatented) varieties.

**TABLE 1**

Comparison of ‘Code 3X97’ to Known Varieties			
Characteristic	‘Code 3X97’	‘3 ELS 0’	‘Eureka’
Seed quantity	Absent to few	Absent to few	Many
Mean fruit length (mm)	76.88	74.56	84.76
Mean fruit diameter (mm)	54.52	57.16	62.84

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**TABLE 1-continued**

Comparison of ‘Code 3X97’ to Known Varieties			
Characteristic	‘Code 3X97’	‘3 ELS 0’	‘Eureka’
Fruit length/diameter ratio	1.41	1.31	1.35
Rind thickness (mm)	4.32	4.48	5.24

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

FIG. 1 shows whole and sectioned fruit of ‘Code 3X97’  
lemon and other varieties;

FIG. 2 shows a ‘Code 3X97’ lemon tree; and,

FIG. 3 shows the trunk and branches of a ‘Code 3X97’  
lemon tree.

The tree shown in FIGS. 2 and 3 is an eleven year old tree  
planted in 2003. Because lighting conditions can affect the  
colors shown in photographic illustrations, color character-  
istics of this new variety should be determined with refer-  
ence to the observations described herein, rather than from  
the illustrations alone.

**DETAILED BOTANICAL DESCRIPTION**

The following detailed botanical description is based on  
observations of trees and fruit of ‘Code 3X97’, budded to  
‘Benton’ rootstock (not patented) and planted in 2003.  
Observations were recorded and photographs taken during  
the 2006 and 2014 growing seasons at Mundubbera, Queen-  
sland, Australia. It should be understood that the character-  
istics described will vary somewhat depending upon cultural  
practices and climatic conditions, and can vary with location  
and season. Quantified measurements are expressed as an

average of measurements taken from a number of individual plants of the new variety. The measurements of any individual plant, or any group of plants, of the new variety may vary from the stated average. Colors are described with reference to The Royal Horticultural Society Colour Chart (5<sup>th</sup> edition, 2007).

<u>Tree:</u>	
Vigor	Vigorous
Density of canopy	Open center
Habit	Upright spreading
Height	4 m
Spread	3 m
Trunk diameter (at 30 cm above graft)	138 mm
Bark texture	Smooth
Bark color	Greyed-orange 163D, greyed-purple N187A
Lenticel size	1 mm
Lenticel color	Greyed-purple N187A
Lenticel quantity	Many, 2 to 4 per cm <sup>2</sup>
Tendency toward alternate bearing	None
Winter hardiness	Same as 'Eureka', performs well in USDA hardiness zones 9 and 10
Chilling requirement	Same as 'Eureka', no chilling requirement
Branch (fruiting branch located about 1 m above graft union):	
Length	80 cm
Diameter	5.4 cm
Crotch angle	Approximately 30 degrees
Bark color	Greyed-orange 163D, greyed-purple N187A
Bark texture	Smooth
Thorns	Present on new growth
Thorn length	Small, 8 to 10 mm
Current year shoot	
Length	87 cm
Color	Green 140A
Blossoms	
Bud shape	Oval
Bud length	2.1 mm
Bud diameter	1 mm
Bud color	Yellow-green 144A
Quantity of blossoms per cluster	4 to 7
Blossom diameter	21 mm
Blossom depth	18 mm
Pollen	None
Sepal length	4.6 mm
Sepal width	4.5 mm
Sepal shape	Arched
Sepal margin	Smooth
Sepal color - upper surface	Yellow 2B
Sepal color - lower surface	Yellow 3B
Quantity of petals per flower	4
Petal shape	Elongated arch
Petal apex	Rounded to acute
Petal margin	Smooth
Petal length	16 mm
Petal width	5 mm
Petal color - upper surface	White NN155D
Petal color - lower surface	White NN155D, violet 84D
Date of first bloom	Late August
Date of full bloom	Early September
Flowering habit	More than once in a season, up to 7 flowerings observed
Date of first fruitlet fall	November
Pedicel length	4.7 mm
Pedicel diameter	1.6 mm
Pedicel color	Yellow-green 151C
Pistil quantity per flower	1
Pistil length	11.6 mm
Pistil color	Orange 26A, yellow 9A, yellow-

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		green 144A
	Anther quantity per flower	1
	Anther length	2.7 mm
5	Anther color	Orange 26A
	Stigma quantity per flower	1
	Stigma length	1.8 mm
	Stigma color	Yellow 9A
	Style quantity per flower	1
	Style length	6.4 mm
10	Style color	Yellow 1B
	Ovary quantity per flower	1
	Ovary length	4.4 mm
	Ovary diameter	2.5 mm
	Ovary color	Yellow-green 144A
	Leaves	
15	Length	104.4 mm
	Width	56.2 mm
	Length/width ratio	1.85
	Blade margin	Crenate
	Leaf shape	Oval, weak concave
20	Apex shape	Acute
	Base shape	Cuneate
	Color of upper surface	Green 143B
	Color of lower surface	Yellow-green 145A
	Anthocyanin coloration in young leaf	Weak, less intense than 'Eureka'
25	Leaf texture (upper surface)	Smooth
	Petiole length	12.4 mm
	Petiole diameter	2.9 mm
	Petiole color	Yellow-green N144D
	Wings	None
30	Fruit	
	Quantity per cluster	4
	Axial diameter	80.48 mm
	Apical diameter	59.88 mm
	Weight	151 g
	General shape in profile	Oval
35	Position of maximum diameter	Middle of fruit
	Navel	None
	Neck	Present, very short
	Nipple	Present, weak to medium prominence
	Rind color	Green 140E3
40	Glossiness	Weak
	Oil glands per cm <sup>2</sup>	About 40
	Oil gland diameter	1 mm
	Oiliness	Oily
	Rind thickness	4.32 mm
	Ease of peeling	Difficult
45	Rind texture	Smooth
	Albedo thickness	3 mm
	Albedo color	Yellow 2C
	Quantity of fruit segments per fruit	7.7 (average of 25 fruit)
	Toughness of segment membrane	Moderate
50	Juice sac length	7 mm
	Juice sac shape	Cylinder
	Juice sac length to width ratio	7:1.3
	Juice sac color	Yellow 2C
	Flesh color	Yellow 2C
55	Juice soluble solids (° Brix)	7.9
	Relative harvest maturity	Early
	Harvest window (date range)	January through December
	Seeds present	None or very few
60	Stem length	20 mm
	Stem diameter	4 mm
	Stem color	Yellow-green 144B
	Parthenocarpy	Absent
	Diseases and pests	No distinguishing resistance or susceptibility noted
65	Harvest yield:	50 to 100 Tons per hectare

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Market use:	Fresh
Keeping quality:	Same as 'Eureka'
Shipping quality:	Same as 'Eureka'

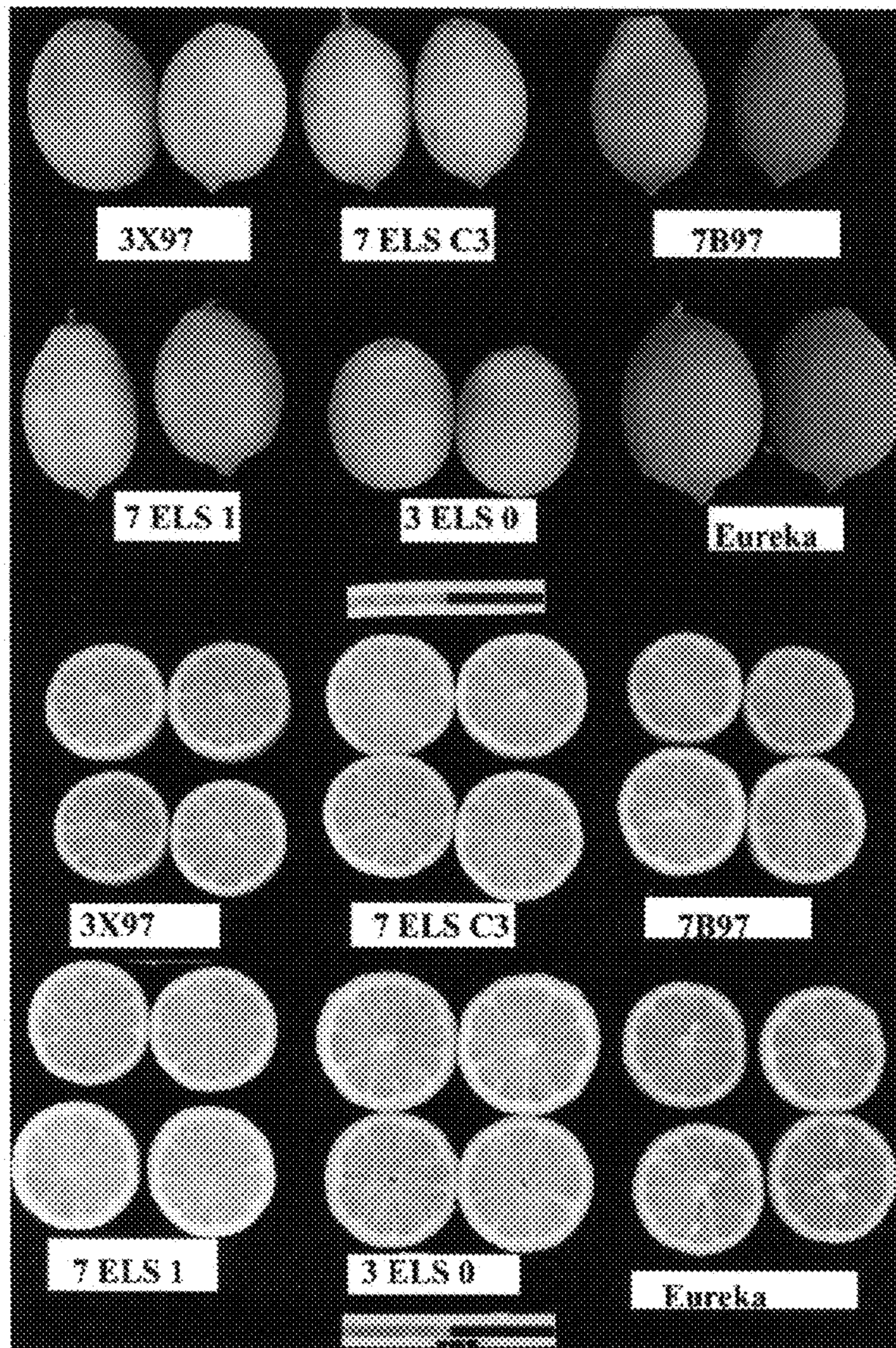
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The invention claimed is:

1. A new and distinct variety of lemon tree, substantially as illustrated and described herein.

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**FIG. 1**



**FIG. 2**



**FIG. 3**