

(12) **United States Plant Patent**
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(10) **Patent No.:** **US PP27,712 P3**
(45) **Date of Patent:** **Feb. 28, 2017**

(54) **CERCIS TREE NAMED ‘NCCC1’**

(50) Latin Name: *Cercis canadensis*
Varietal Denomination: **NCCC1**

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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 149 days.

(21) Appl. No.: **14/544,063**

(22) Filed: **Nov. 20, 2014**

(65) **Prior Publication Data**

US 2016/0150703 P1 May 26, 2016

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

(52) **U.S. Cl.**
USPC **Plt./216**

(58) **Field of Classification Search**
USPC Plt./216
See application file for complete search history.

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(57) **ABSTRACT**

‘NCCC1’ is a new cultivar of eastern redbud tree with
unique, multi-colored foliage that includes a range and
combination of colors including green, white, purple, and
pink on emerging and young foliage.

3 Drawing Sheets

1

Latin name of the genus and species: The Latin name of
the novel plant variety disclosed herein is *Cercis canadensis*.

Variety denomination: The inventive variety of the *Cercis*
canadensis disclosed herein has been given the varietal
denomination ‘NCCC1’.

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct hybrid
cultivar of *Cercis canadensis* herein referred to by the
cultivar name ‘NCCC1’. This new redbud was developed
through a breeding program at North Carolina State Uni-
versity, Mills River, N.C. ‘NCCC1’ was selected from a
population of second generation descendants from a hybrid
cross between *Cercis canadensis* ‘Forest Pansy’ (U.S. Plant
Pat. No. 2,556) (male parent) and *Cercis canadensis* ‘Silver
Cloud’ (non-patented) (female parent). Plants of the original
F₁ hybrids between ‘Forest Pansy’ and ‘Silver Cloud’ were
planted in Mills River, N.C., and isolated from other *Cercis*.
Open pollinated seeds were collected from these trees in
2004 and germinated in the spring of 2005. Nineteen seed-
lings were selected that expressed purple and/or variegated
foliage traits and were also planted in Mills River, N.C.
‘NCCC1’, originally designated as H2005-055-003, was
selected primarily for its attractive multi-colored foliage in
spring and early summer. The first asexual propagation of
‘NCCC1’ was carried out in 2009 by budding at a nursery in
Belvidere, Tenn. ‘NCCC1’ has been found to retain its
distinctive characteristics, through repeated asexual propa-
gation, over a 9-year period.

SUMMARY OF THE INVENTION

The following are the unique and distinguishing charac-
teristics of this new cultivar when grown under standard
horticultural practices at North Carolina State University,
Mills River, N.C.: emerging and young leaves express a

2

range and combination of colors including green, white,
purple, and pink.

BRIEF DESCRIPTION OF THE DRAWINGS

This new redbud is illustrated by the accompanying
photographs which show the plant’s foliage and inflores-
cences. The colors shown are as true as can be reasonably
obtained by conventional photographic procedures. Colors
in the photographs may differ slightly from the color values
cited in the detailed botanical description, which accurately
describe the colors of the new redbud.

FIG. 1 is a color photograph showing the emerging and
young leaves of ‘NCCC1’ on a 4-year-old tree in Mills
River, N.C. on May 28, 2009.

FIG. 2 is a color photograph showing the color of emerg-
ing and young leaves of ‘NCCC1’ on a 4-year-old tree in
Mills River, N.C. on May 28, 2009.

FIG. 3 is a color photograph showing flowers of ‘NCCC1’
on a 9-year-old tree in Mills River, N.C. on Apr. 15, 2014.

DETAILED BOTANICAL DESCRIPTION

The following is a detailed description of the botanical
characteristics of the new and distinct variety of the redbud
tree known by the denomination ‘NCCC1’. The detailed
description was taken on an eight-year-old field-grown tree
in Mills River, N.C. in April-October of 2013. All colors
cited herein refer to The Royal Horticultural Society Colour
Chart (The Royal Horticultural Society (R.H.S.), London,
2001 Edition). Where specific dimensions, sizes, colors, and
other characteristics are given, it is to be understood that
such characteristics are approximations or averages set forth
as accurately as practicable.

TECHNICAL DESCRIPTION OF THE VARIETY

Classification:

Botanical name.—*Cercis canadensis* ‘NCCC1’.

Common name.—Redbud.

Parentage: A second-generation hybrid that resulted from the original cross pollination of *Cercis canadensis* 'Forest Pansy' × *Cercis canadensis* 'Silver Cloud'.

Plant description:

Plant habit.—Upright to spreading.
Height.—4 meters high after 9 years.
Spread.—3 meters wide after 9 years.

Trunk:

Diameter.—14 cm. at 30 cm. above the ground.
Bark surface.—Rugose.
Color.—Brown (N200A) to greyed-green (198).

Stems:

Color.—Brown-tan (N200A).
Length.—Approximately 44 cm per year of growth.
Surface.—Glaucous.
Lenticels.—Numerous (1.5 to 2 per mm²), round, greyed-orange (165C).

Foliage:

Type.—Deciduous.
Leaf arrangement.—Alternate.
Leaf shape.—Cordate to reniform.
Leaf division.—Simple.
Leaf base.—Cordate.
Leaf apex.—Cuspidate.
Leaf venation.—Reticulate.
Leaf surface.—Glaucous (upper and lower).
Leaf margin.—Entire.
Leaf attachment.—Petiolate.
Petiole diameter.—4-8 cm.
Petiole length.—2-6 cm.
Petiole shape.—Round.
Petiole color.—N79A Deep purple.
Petiole surface.—Glabrous.
Stem diameter.—20 cm in diameter measured 30 cm from the ground on an 11 year old tree.
Stem internode length.—About 3 cm.
Stem aspect.—About 45 degrees.
Stem strength.—Strong.
Leaf color.—Emerging (<25% mature size). Upper surface: Purple (N77A) to red-purple (N67B). Lower surface: Red-purple (59A). Intermediate (26 to <75% mature size): Upper surface: Green (139A) speckling or throughout central portion of lamina with red-purple (N67C, 67C and 67D) to white (N155B to N155C) throughout or towards the margin. Lower surface: Purple (N77A to N77C) with some green (139A) speckling or blotches and white (N155B to N155C) typically towards the margins. Mature (76-100% mature size): Upper surface: Green (139A) with some white (N155C) mostly along the margins. Lower surface: Purple (N77A to N77C) to green (139A) with some white (N155C) along the margins. Leaf length: 7 cm to 10 cm (from leaf tip to base of leaf blade). Leaf width: 7 cm to 10 cm (widest portion).

Flowers:

Flowering season.—Early to mid-April in Mills River, N.C.
Inflorescence.—Papilionaceous flowers arranged in a cluster.
Number of flowers per cluster.—2 to 7.
Arrangement.—Sessile clusters.
Location.—Nodes of previous season growth and along older stems.

Length of bloom.—2 to 3 weeks.

Flower length.—1 cm.

Flower width.—3 cm to 4 cm.

Flower depth.—6 mm.

Pedicel length.—1-2 cm.

Pedicel diameter.—0.5 mm.

Pedicel shape.—Round.

Pedicel color.—Purple Group (71A).

Pedicel surface.—Smooth.

Pedicel strength.—Medium.

Persistence.—Self-cleaning.

Flower habit.—Sparse.

Fragrance.—Lacking.

Flower bud:

Shape.—Broadly oval.

Color.—Purple Group (N77A).

Surface.—Smooth.

Diameter.—1 mm to 1.5 mm.

Length.—4 mm to 5 mm.

Petals:

Number.—5, lower 2 fused.

Color.—Red-purple (N74B to N66D).

Petal surface.—Smooth (both surfaces).

Petal margin.—Entire.

Petal length.—1 cm.

Petal width.—4 cm.

Petal shape.—Oblong.

Apex.—Rounded.

Base.—Cuneate.

Calyx:

Shape.—Vase.

Length.—4 mm.

Diameter.—5 mm.

Color.—Purple (71A).

Surface.—Smooth.

Sepals:

Number.—1 fused.

Color.—Red-purple (N66B).

Surface.—Smooth.

Reproductive organs:

Pistil.—1 cm long, 1-2 mm wide. Color: Red-Purple (59B). Surface: Smooth. Number: 1.

Stigma.—Shape: Elliptical. Length: Less than 1 mm.

Width: Less than 1 mm. Color: Red-Purple (59B).

Style.—Length: Less than 1 mm. Width: Less than 1 mm. Color: Red-purple (60D).

Stamens:

Number.—10.

Length.—8 mm.

Width.—Less than 1 mm.

Color.—(Filament) Red-purple (59D).

Anthers:

Shape.—Round to oblong.

Length.—Less than 1 mm.

Color.—Red-purple (59B).

Pollen:

Color.—Yellow (9B), abundant.

Ovary: Superior position, elongate shape.

Length.—1 cm.

Width.—1 cm.

Color.—Red-purple (59B).

Fruit:

Type.—Legume pod; rarely formed due to low fertility.

Disease and insect resistance: No significant disease or insect pests have been observed.

Cold hardiness: At least USDA zone 6b; not tested in colder zones.

COMPARISON WITH PARENTAL SPECIES

Table 1 shows distinguishing characteristics between ‘NCCC1’ and its parental taxa.

TABLE 1			
Comparison of foliage of ‘NCCC1’ to original parental cultivars.			
Taxa			
Trait	‘Forest Pansy’	‘Silver Cloud’	‘NCCC1’
Color of emerging and young	Deep-purple (N77A) to red-purple	White (N155B to N155C) and green (139A)	Emerging with purple (N77A) to red-purple (N67B). Developing more green

TABLE 1-continued

Comparison of foliage of ‘NCCC1’ to original parental cultivars.			
Taxa			
Trait	‘Forest Pansy’	‘Silver Cloud’	‘NCCC1’
foliage (upper surface)	(59A)	in various proportions.	(139A) speckling or throughout central portion of lamina with red-purple (N67C, 67C and 67D) to white (N155B to N155C) throughout or towards the margin of young leaves.

What is claimed is:
1. A new and distinct hybrid of eastern redbud tree named ‘NCCC1’, illustrated and described within.

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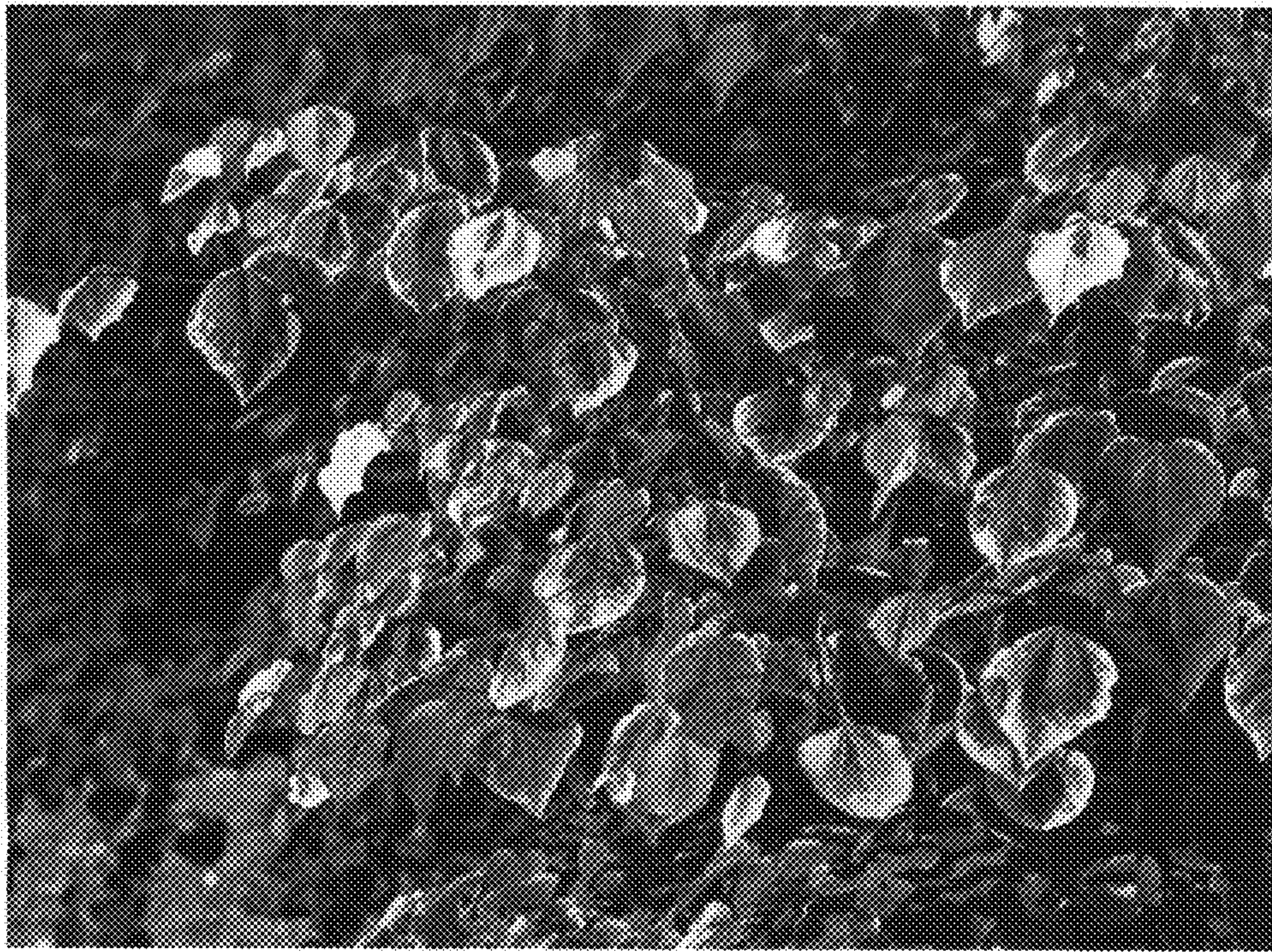


Fig. 1



Fig. 2



Fig. 3