



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

(10) **Patent No.:** **US PP20,765 P2**  
(45) **Date of Patent:** **Feb. 16, 2010**

(54) **HYDRANGEA PLANT NAMED ‘NCHA1’**

(50) Latin Name: *Hydrangea arborescens*  
Varietal Denomination: **NCHA1**

(75) Inventor: **Thomas G. Ranney**, Arden, NC (US)

(73) Assignee: **North Carolina State University**,  
Raleigh, NC (US)

(\*) 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.: **12/313,080**

(22) Filed: **Nov. 17, 2008**

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

(52) **U.S. Cl.** ..... **Plt./250**

(58) **Field of Classification Search** ..... **Plt./250**  
See application file for complete search history.

(56) **References Cited**

**OTHER PUBLICATIONS**

GTITM UPOVROM Citation for ‘NCSUHA1’ as per CA PBR  
08-6471, filed Nov. 28, 2008.\*

\* cited by examiner

*Primary Examiner*—Kent L Bell

(74) *Attorney, Agent, or Firm*—Jondle & Associates, P.C.

(57) **ABSTRACT**

‘NCHA1’ is a new *Hydrangea* plant particularly distin-  
guished by having a medium-sized, rounded, multi-stemmed  
shrub, a unique combination of compound, corymb inflores-  
cences with prevalent sterile flowers and rose to pink colored  
sepals, is disclosed.

**2 Drawing Sheets**

**1**

Genus and species: *Hydrangea arborescens*.

Variety denomination: ‘NCHA1’.

**BACKGROUND OF THE INVENTION**

The present invention comprises a new and distinct cultivar  
of *Hydrangea*, botanically known as *Hydrangea arbores-*  
*scens*, and hereinafter referred to by the cultivar name  
‘NCHA1’. This new *Hydrangea* was developed through a  
breeding program at Mills River, N.C. ‘NCHA1’ originated  
as an open pollinated (F2) seedling from *H. arborescens*  
cultivar ‘H2005-045-061’ (unpatented) that was grouped in  
an isolation block with full sibling plants of the same parent-  
age.

The first asexual propagation of ‘NCHA1’ was carried out  
in June 2006 by rooting stem cuttings at Mills River, N.C.,  
USA and has been asexually reproduced repeatedly by veg-  
etative cuttings in North Carolina over a two year period.  
‘NCHA1’ roots readily from softwood cuttings treated with a  
basal dip of 2,500–4,000 ppm indole butyric acid (potassium  
salt) in water. ‘NCHA1’ has been found to retain its distinc-  
tive characteristics through successive asexual propagations.

Plant Breeder’s Rights for this cultivar have been applied  
for. ‘NCHA1’ has not been made publicly available more than  
one year prior to the filing of this application.

**SUMMARY OF THE INVENTION**

The following are the most outstanding and distinguishing  
characteristics of this new cultivar when grown under normal  
horticultural practices at Mills River, N.C., USA.

1. Medium-sized, rounded, multi-stemmed shrub;
2. Rose to pink colored sepals; and

**2**

3. Compound, corymb inflorescences with prevalent sterile  
flowers.

**DESCRIPTION OF THE PHOTOGRAPHS**

This new *Hydrangea* plant is illustrated by the accompa-  
nying photographs which show the plant’s form, foliage and  
inflorescences. The colors shown are as true as can be rea-  
sonably obtained by conventional photographic procedures.  
The photographs were taken on 2-year-old plants in July  
2008, growing under landscape conditions in Arden, N.C.

FIG. 1 Shows the mature plant habit.

FIG. 2 Shows a close-up of the mature inflorescences.

FIG. 3 Shows the size and color ranges of mature inflores-  
cences.

**DESCRIPTION OF THE NEW CULTIVAR**

The following detailed description sets forth the distinctive  
characteristics of ‘NCHA1’. The detailed description was  
taken on 2-year-old plants growing under landscape condi-  
tions in Arden, N.C., in July 2008. Color references are to The  
R.H.S. Colour Chart of The Royal Horticultural Society of  
London (R.H.S.), 2001 Edition.

**DETAILED BOTANICAL DESCRIPTION**

Classification:

*Botanical name.*—*Hydrangea arborescens*.

*Common name.*—Smooth *Hydrangea*.

Parentage: ‘NCHA1’ originated as an open pollinated (F2)  
seedling from *H. arborescens* cultivar ‘H2005-045-061’  
(unpatented) that was grouped in an isolation block with  
full sibling plants of the same parentage (‘Eco Pink Puff’  
(unpatented)×‘H2004-006-012’ (unpatented)).

Plant description:

*Classification.*—Shrub.

*Type.*—Deciduous.

*Form*.—Multi-stemmed.  
*Shape*.—Rounded plant habit.  
*Usage*.—Adaptable landscape shrub.  
*Height (from top of soil including inflorescences)*.—  
About 100 cm. 5  
*Diameter (including inflorescences)*.—About 100 cm.  
*Branching habit*.—Freely branching with as many as  
100 or more terminal shoots per plant.  
*Shoots*.—Length: 50 cm to 100 cm Diameter: 0.3 cm to  
1.0 cm Internode length: 5 cm to 15 cm Texture: 10  
Glabrous Color: RHS 146C.  
*Time to produce a finished plant having inflores-*  
*cences*.—3 months to 6 months.  
*Time to initiate and develop roots*.—3 weeks to 4 weeks.  
Leaves: 15  
*Form*.—Simple.  
*Arrangement*.—Opposite.  
*Number*.—10 to 25 leaves per shoot.  
*Length*.—6 cm to 10 cm.  
*Width*.—5 cm to 8 cm. 20  
*Shape*.—Broadly ovate.  
*Apex*.—Acuminate.  
*Base*.—Cordate to rounded  
*Margin*.—Dentate to serrate.  
*Venation pattern*.—Pinnate, opposite to sub-opposite. 25  
*Venation color (both surfaces)*.—RHS 191 B.  
*Texture*.—Upper surface: Glabrous Lower surface:  
Slightly pubescent.  
*Immature leaf color in summer*.—Upper surface: RHS  
138A Lower surface: RHS 138B. 30  
*Mature leaf color in summer*.—Upper surface: RHS  
139A Lower surface: RHS 138A.  
*Petioles*.—Length: 1.5 cm to 4 cm Diameter: 0.2 cm  
Color: Upper surface: RHS 181B Lower surface:  
RHS 146C. 35  
Inflorescence:  
*Appearance or form*.—Fertile (approximately 600) and  
sterile flowers (approximately 600) arranged on indi-  
vidual hemispherical or dome-shaped terminal, com-  
pound corymbs. 40  
*Corymb*.—Diameter: 8 cm to 20 cm Height: 5 cm to 12  
cm Season: Continuously flowering from late May to  
early August in Arden, N.C. Quantity: Often 100 or  
more corymbs per plant over the summer Longevity:  
Individual corymbs are showy for approximately 4 45  
weeks.  
*Sterile flowers*.—Petals, pistils, and stamens are greatly  
reduced (<0.5 mm) and insignificant Buds: Shape:  
Round Diameter: 0.1 cm to 0.2 cm Color: RHS 187C  
Sepals: Number: 2 to 4 Length: 0.5 cm to 0.7 cm 50  
Width: 0.3 cm to 0.5 cm Shape: Lanceolate to oval  
Apex: Acute Base: Attenuate Margin: Entire Texture:  
Smooth/glabrous Color (when expanding, both sur-  
faces): RHS 187C Color (when fully expanded, both

surfaces): Ranges from RHS 68D to RHS 68C, and  
from RHS N66D to RHS N66C.  
*Fertile flowers*.—Sepals and petals are greatly reduced  
(<0.5 mm) and insignificant Buds: Shape: Round  
Diameter: 0.1 cm to 0.2 cm Color: RHS 186B Flower  
size: Width: 0.1 cm to 0.2 cm Height: 0.2 cm to 0.3  
cm.  
Reproductive organs:  
*Pistils*.—2, fused Color: RHS 155B throughout Length:  
0.2 cm Stigma: Blunt Stigma diameter: 0.025 cm  
Style length: 0.1 cm Ovary shape: Rounded Ovary  
diameter: 0.1 cm.  
*Stamens*.—Number: 10 Anther: Shape: Rounded, fusi-  
form Length: 0.025 cm long Color: RHS 158D Fila-  
ment length: 0.2 cm Filament color: RHS 155B Pol-  
len: Scarce.  
Fruit/seed set: Seeds are minute, dust-like.  
Disease and insect resistance: No significant disease or insect  
pests have been observed.

COMPARISON WITH PARENTAL LINES AND  
KNOWN CULTIVAR

‘NCHA1’ is distinguished from cultivar ‘H2005-045-061’  
by having a compound, corymb inflorescence with prevalent  
sterile florets.  
‘NCHA1’ has a unique combination of compound, corymb  
inflorescences with around 600 prevalent sterile flowers and  
rose to pink colored sepals not found in other known com-  
mercial cultivars of *Hydrangea arborescens*. Table 1 shows  
comparisons between ‘NCHA1’ and two other commercial  
*hydrangea* cultivars, ‘Annabelle’ (unpatented) and ‘Eco Pink  
Puff’ (unpatented).

TABLE 1

COMPARSION TO COMMERCIAL CULTIVARS			
Characteristic	‘NCHA1’	‘Annabelle’	‘Eco Pink Puff’
Inflorescence corymb diameter	8 cm to 20 cm	26 cm to 32 cm	6 cm to 10 cm
Inflorescence corymb height	5 cm to 12 cm	22 cm to 26 cm	2 cm to 6 cm
Sterile flowers number per corymb	600	1,650	0 to 4
Mature sepal color when fully expanded	Rose to pink (RHS 68D to RHS 68C and RHS N66D to RHS N66C)	Ivory (RHS 155C)	Pale Pink (RHS 69C)

I claim:  
1. A new and distinct cultivar of *Hydrangea* plant as shown  
and described herein.

\* \* \* \* \*



FIG. 1



FIG. 2

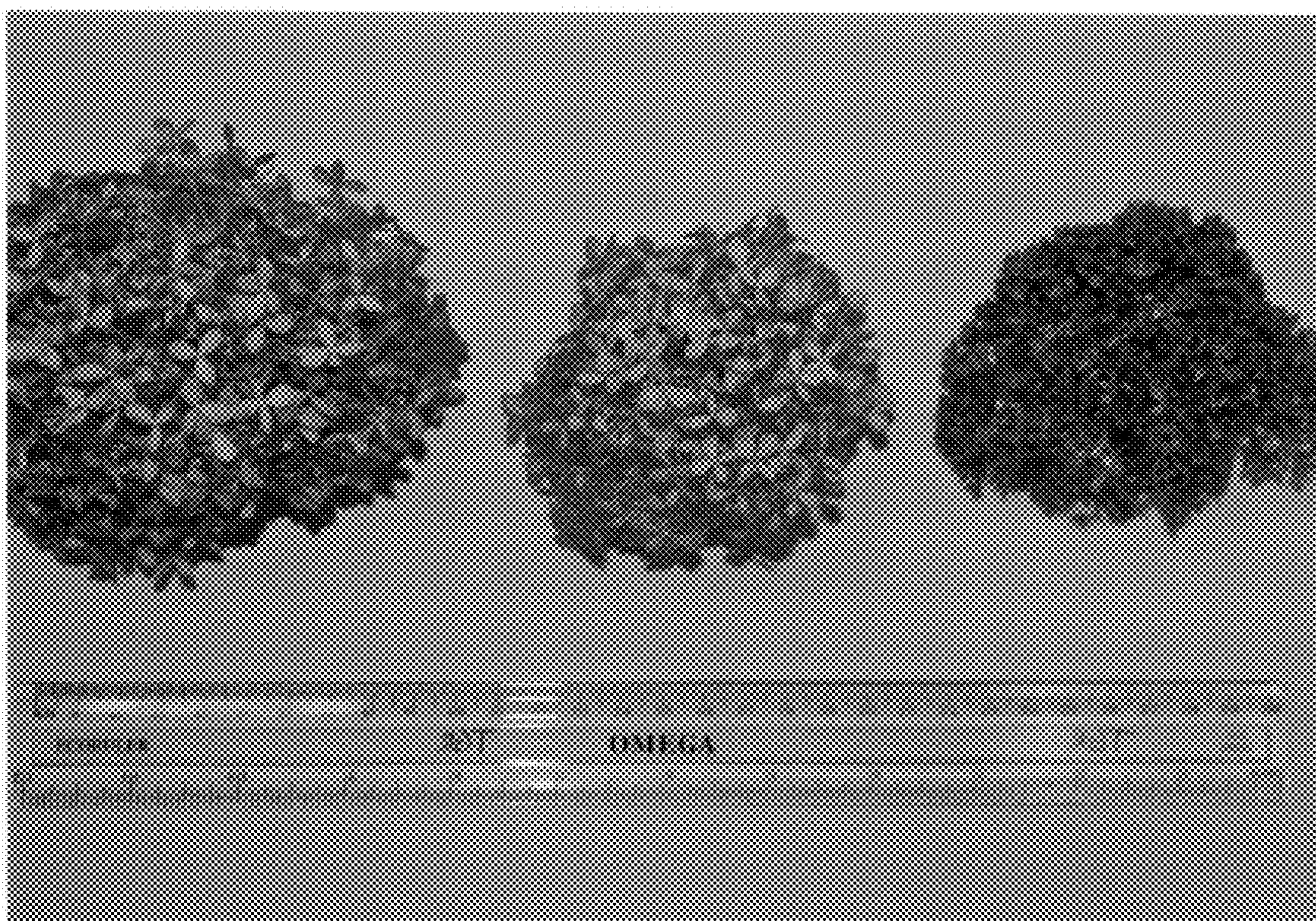


FIG. 3