

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

(10) **Patent No.:** **US PP18,247 P3**  
(45) **Date of Patent:** **Nov. 27, 2007**

(54) **BERMUDAGRASS PLANT NAMED**  
**'PREMIER'**

(50) Latin Name: *Cynodon dactylon*  
Varietal Denomination: **Premier**

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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 599 days.

(21) Appl. No.: **10/768,091**

(22) Filed: **Feb. 2, 2004**

(65) **Prior Publication Data**  
US 2005/0172377 P1 Aug. 4, 2005

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

(52) **U.S. Cl.** ..... **Plt./389**

(58) **Field of Classification Search** ..... **Plt./389**  
See application file for complete search history.

(56) **References Cited**

**PUBLICATIONS**

MPEP 609 [R-5] p. 1-4 (MPEP=Manual of Patent Exam-  
ining Practice) USPTO.\*

\* cited by examiner

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(57) **ABSTRACT**

An asexually reproduced variety of perennial bermudagrass  
with a unique combination of characters including fine blade  
width and medium internode length.

**1 Drawing Sheet**

**1**

Latin name of the genus and species of the plant claimed:  
The present invention relates to the genus and species  
*Cynodon dactylon* (L.) Pers.  
Variety denomination: 'Premier'.

**BACKGROUND OF THE INVENTION**

**Field of Invention**

The present invention relates to a new and distinct asexu-  
ally reproduced variety of perennial bermudagrass *Cynodon*  
*dactylon* (L.) Pers.

**BRIEF SUMMARY OF THE INVENTION**

This invention relates to a new and distinct perennial  
bermudagrass cultivar identified as 'Premier' bermudagrass  
(herein referred to as 'Premier'). The inventors, Donald  
Parsons and Virginia Lehman, discovered 'Premier' under  
cultivated conditions in a golf course fairway near Seal  
Beach, Calif. 'Premier' was identified as a distinctly differ-  
ent vegetative patch or segregated clonal plant differing by  
darker green leaf color from the suspected parental variety  
common Tifgreen (unpatented). The inventors asexually  
reproduced 'Premier' by taking vegetative cuttings of the  
plant material from the golf course including stolons and  
rhizomes, cutting the rhizomes and stolons into segments,  
each with a vegetative bud, and rooted them in potting media  
in a greenhouse near Parker, Tex.

For purposes of registration under the "International Con-  
vention for the Protection of New Varieties of Plants"  
(generally known by its French acronym as the UPOV  
Convention) and noting Section 1612 of the Manual of Plant  
Examining Procedure, it is proposed that the title of the  
invention is Bermudagrass plant named 'Premier'.

**2**

**BRIEF DESCRIPTIONS OF THE**  
**ILLUSTRATIONS**

FIG. 1. Tiller of 'Premier' bermudagrass.

**COMPLETE DESCRIPTION OF THE VARIETY**

'Premier' was characterized in greenhouse and field con-  
ditions. 'Premier' is a unique variety of bermudagrass  
(*Cynodon dactylon* (L.) Pers). that was discovered under  
cultivated conditions in a gold course fairway near Seal  
Beach, Calif. 'Premier' was identified in the field as having  
a darker green leaf color than its suspected parent 'Tifgreen'.  
The golf course fairway was located in USDA Plant Hardi-  
ness Zone 9. 'Premier' was propagated by the inventors  
under field and greenhouse conditions in Parker, Tex. by  
cutting of rhizomes and stolons, rooting them in soil, and  
planting of the rooted material to provide planting stock for  
studying performance and for comparison of morphological  
characters after propagation. 'Premier' has been propagated  
by rhizomes, stolons, tillers, and sod. Asexually reproduced  
plants of 'Premier' have remained stable and true to type  
through successive generations of propagation. No seedling  
establishment from 'Premier' has been noticed in either  
greenhouse or field studies.

'Premier' is a perennial bermudagrass that spreads by  
both stolons and rhizomes. Characteristics of 'Premier'  
measured in 2003 were taken from plants that were approxi-  
mately 9 months in age. The greenhouse was located near  
Lebanon, Oreg., with a nighttime low temperature of 50  
degrees F., and daytime high of 80 degrees F., and a  
minimum soil temperature of 60 degrees F. The plants were  
grown with a minimum 14-hour day length, supplemented  
with photosynthetically active radiation equivalent to  
approximately 50% sunlight. The plants were fertilized with  
the equivalent of 1 pound of actual N per month, using a



soluble fertilizer of 20-20-20 in two equal soluble applications per month.

‘Premier’ has a finer leaf texture than the suspected parent ‘Tifgreen’ (Table 1) when measured under greenhouse conditions in Lebanon, Oreg. ‘Premier’ has few surface leaf (1–5) hairs compared to the variety Tifgreen which has no leaf hairs. The hairs at the mouth of the sheath of ‘Premier’ are longer than ‘Tifway’ and ‘Tifgreen’ (Table 3). No seeds of ‘Premier’ have developed; no seedlings have been noted in the field studies. The inflorescences produced in the greenhouse have consisted of empty florets and no seed has been formed.

‘Premier’ has not shown any susceptibility in tests to date in the Aubrey, Tex. test production site to the diseases and insects common to the bermudagrass genus. ‘Premier’ has shown good turfgrass performance and temperature adaptation when tested in Dallas, Tex. (Table 4), and as far north as Aubrey, Tex. USDA zone 8A, which would extend the area of adaptation for ‘Premier’ in a line from South-Central Alabama across central Arkansas through North Central Texas, across New Mexico and Arizona to Los Angeles in an East/West line and on a North/South line from North central Texas south through Mexico. ‘Premier’ will be limited only by winter survival in colder regions, and is undergoing further research to determine the most northern area of survival at this time. ‘Premier’ is similar to most medium to fine textured bermudagrasses in water use demands as shown in production situations, and will be limited by adequate precipitation in drier to arid regions. ‘Premier’ is adapted from sandy to heavier loam soil textures and from slightly acid to slightly alkaline soil pH.

TABLE 1

Leaf blade widths and lengths and texture class of selected bermudagrass cultivars, measured under greenhouse conditions in Lebanon, OR, 2003.					
Variety	Width, 2nd youngest stolon leaf mm	Length, 2nd youngest stolon leaf cm	Length, 3rd panicle leaf cm	Width, 3rd panicle leaf mm	Leaf Texture Class
OR2002	2.15	2.24	2.29	1.58	Medium
Tifgreen	2.77	2.79	2.01	2.11	Medium
Tifway	2.37	3.01	2.22	1.77	Medium

TABLE 2

Inflorescence and leaf characters of selected bermudagrass cultivars, measured under greenhouse conditions in Lebanon, OR 2003.					
Variety	Number panicle branches cm	Flag leaf width mm	Flag leaf length cm	Leaf Sheath Length, Flag Leaf mm	Leaf Sheath Length, 4 <sup>th</sup> Youngest Vegetative Leaf mm
‘Premier’	3.50	0.89	0.61	2.9	1.9
‘Tifgreen’	3.38	1.26	0.84	3.1	1.8
‘Tifway’	3.00	0.91	0.65	3.3	2.4

TABLE 3

Sheath hair length and stolon internode length measurements of selected bermudagrass cultivars, measured under greenhouse conditions in Lebanon, OR, 2003			
Variety	Hair length, mouth of sheath mm	Stolon Internode length, node 2-3 cm	Stolon Internode length, node 3-4 cm
‘Premier’	2.35	4.63	5.19
‘Tifgreen’	2.06	3.77	3.60
‘Tifway’	2.12	5.73	5.33

TABLE 4

Turf quality characters, Dallas, TX, 2003.				
Genetic Color	Spring Greenup	Leaf texture	Quality May	Variety
7.33	5.67	7.67	6.33	Premier
7.57	6.00	8.00	5.67	Tifway
7.33	5.87	7.00	6.67	Celebration
7.00	5.00	6.33	6.00	Tift No. 1
6.57	4.00	6.00	4.00	Az. Common
6.67	3.33	6.00	5.00	NM Sahara
7.00	6.00	7.33	6.33	Midlawn
7.67	5.33	7.67	6.00	Tifsport
7.67	5.67	6.33	5.00	MS-Choice
0.75	1.00	0.70	1.30	LBD
Quality June	Quality July	Quality August	Mean Quality	Variety
6.33	7.00	7.00	5.47	Premier
5.67	7.00	6.33	5.17	Tifway
5.67	6.67	6.00	5.03	Celebration
5.67	6.00	5.57	5.19	Tift No. 1
4.67	5.00	5.00	4.14	Az. Common
5.00	6.00	5.33	4.53	NM Sahara
6.33	6.67	7.00	5.36	Midlawn
6.33	7.00	7.00	5.08	Tifsport
6.33	6.33	6.33	4.64	MS-Choice
0.77	0.66	0.71		LBD
Spring Density	Summer Density	Fall Density	Dec. Color	Variety
5.00	8.00	7.67	2.67	Premier
5.00	7.67	8.00	5.00	Tifway
5.33	8.00	7.33	3.00	Celebration
5.33	7.67	7.33	3.33	Tift No. 1
3.67	7.00	7.00	2.00	Az. Common
4.67	7.00	7.00	1.33	NM Sahara
6.00	7.67	8.00	3.67	Midlawn
4.00	8.00	7.67	5.00	Tifsport
4.33	7.67	7.33	3.00	MS-Choice
1.79	0.53	1.21	1.00	LBD

## COMPLETE BOTANICAL DESCRIPTION OF THE VARIETY

Origin: ‘Premier’ is a cultivar of a single clone of bermudagrass discovered under cultivated conditions in a Seal Beach, Calif. golf course fairway of ‘Tifgreen’ bermudagrass.

Classification: *Cynodon dactylon* (L.) Pers.

Growth habit: ‘Premier’ is a perennial plant that spreads by stolons and rhizomes and produces a dense, fine textured turfgrass. The inflorescence of ‘Premier’ is a panicle, with branches originating from a common center.

Leaf blade: fold in the bud, slightly concave surface versus Tifgreen and Tifway, both of which have flat leaves.

## 5

Leaf blade pubescence: Adaxial leaf surface have very few, short (1–5) hairs versus Tifway with many hairs on adaxial surface; hairs mostly absent on abaxial leaf surface.

Leaf sheath pubescence: present with very short hairs versus Tifgreen with no pubescence.

Leaf blade margin: rough versus Tifgreen with slightly rough margin.

Leaf blade veins: obscure.

Leaf ligule hairs; present, very short.

Leaf blade flexibility (softness): Stiff versus Tifgreen: soft; Tifway; medium stiffness.

Vegetative leaf, fourth youngest vegetative leaf:

*Blade length mean.*—2.46 cm

*Blade width mean.*—2.15 mm

*Sheath length mean.*—1.9 cm.

Stolon internode length, node 2–3: 4.63 cm.

Stolon internode length, node 3–4: 5.19 cm.

Stolon internode width, node 2–3: 0.89×1.02 mm.

Stolon internode width, node 3–4: 0.99×1.07 mm.

Inflorescence characters:

*Length of flowering stem from lower node to panicle center.*—7.74; Tifgreen: 14.14 cm.

## 6

*Internode length from flag leaf to 2<sup>nd</sup> internode below flag.*—4.73 cm.

*Culm width, stem thickness, base of floral area.*—0.47 mm; Tifway: 0.54 mm.

*Node thickness, node below flag leaf.*—0.65 mm.

Mature plant height, including inflorescence: 10.8; Tifgreen: 15.23 cm.

Color Notations, vegetative characters, based on The R.H.S. Colour Chart (light quality, photoperiod, and general growth of the plants affect color notations):

*Leaf blade color adaxial leaf surface.*—137B green.

*Stolon color.*—59A red purple and 145B yellow green.

Color Notations, floral characters, based on The R.H.S. Colour Chart (light quality, photoperiod, and general growth of the plants affect color notations):

*Stigma color.*—61A red-purple.

*Anther color.*—5C yellow.

Turf quality (rated 1–9, 9 best): 8; ‘Tifgreen’: 7.

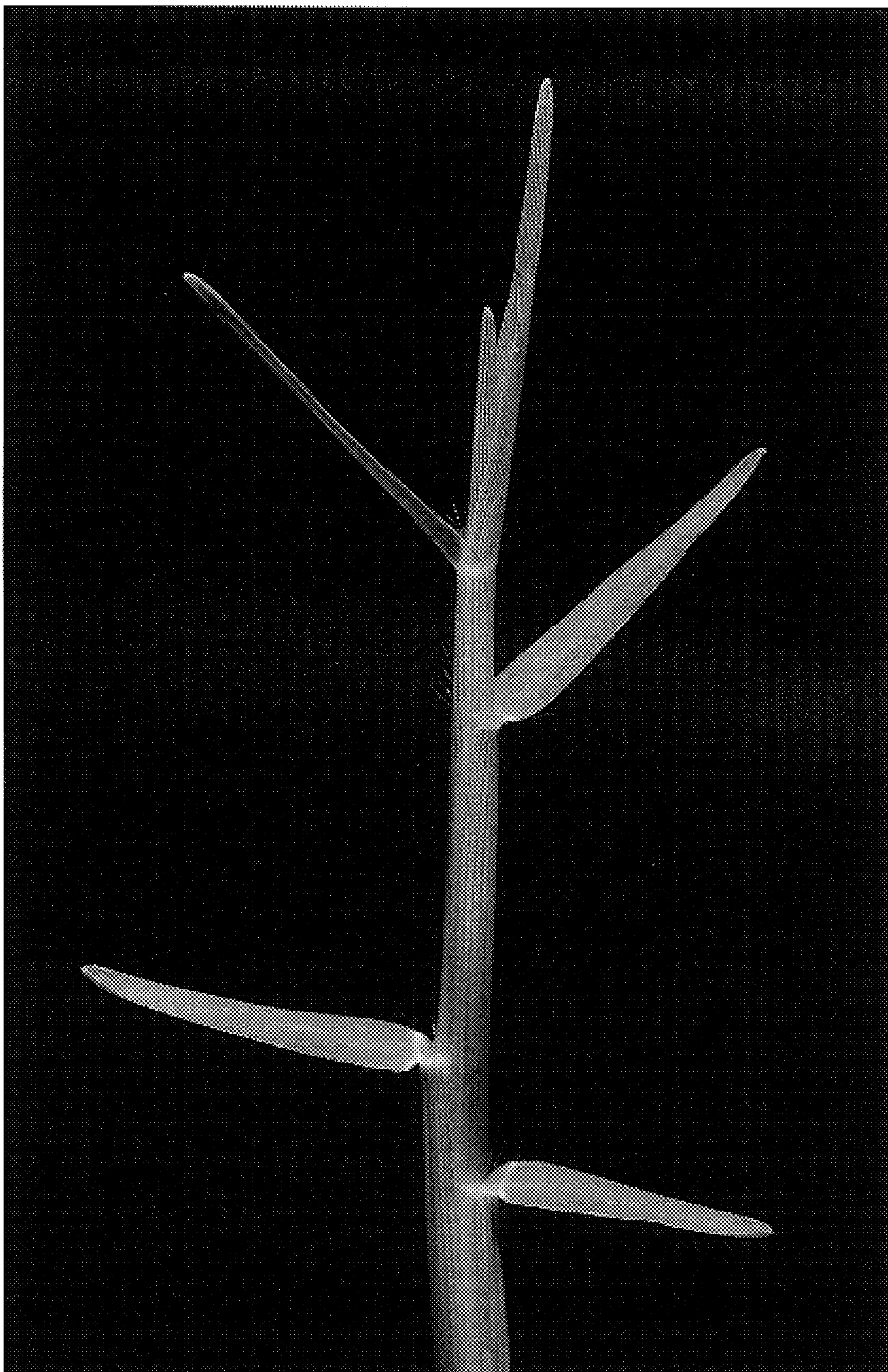
Turf color (rated 1–9, 9 best): 7; ‘Tifgreen’: 6.

We claim:

1. A new and distinct variety of bermudagrass plant, substantially as described and illustrated herein.

\* \* \* \* \*





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

PATENT NO. : PP 18,247 P3  
APPLICATION NO. : 10/768091  
DATED : November 27, 2007  
INVENTOR(S) : Parsons and Lehman

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Specification:

Column 4, Table 4, the second entry in the column labeled "Genetic Color", "7.57" should be --7.67--.

Column 4, Table 4, the second entry in the column labeled "Spring Greenup", "6.00" should be --5.00--.

Column 4, Table 4, the third entry in the column labeled "Spring Greenup", "5.87" should be --5.67--.

Column 4, Table 4, the ninth entry in the column labeled "Quality May", "5.00" should be --6.00--.

Column 4, Table 4, the tenth entry in the column labeled "Variety", all three occurrences of "LBD" should be --LSD--.

Column 4, Table 4, the ninth entry in the column labeled "Quality June", "6.33" should be --5.33--.

Column 4, Table 4, the sixth entry in the column labeled "Quality July", "6.00" should be --5.00--.

Column 4, Table 4, the fourth entry in the column labeled "Quality August", "5.57" should be --5.67--.

Column 4, line 63, "hat" should be --that--.

Column 5, line 10, "hairs;" should be --hairs:--.

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

PATENT NO. : PP 18,247 P3  
APPLICATION NO. : 10/768091  
DATED : November 27, 2007  
INVENTOR(S) : Parsons and Lehman

Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 5, line 12, "Tifway;" should be --Tifway:--.

Signed and Sealed this

Twenty-ninth Day of July, 2008

A handwritten signature in black ink, reading "Jon W. Dudas". The signature is stylized, with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*