

(12) **United States Patent**  
Boyce et al.

(10) **Patent No.:** US 8,636,822 B1  
(45) **Date of Patent:** Jan. 28, 2014

(54) **DETHATCHING, EXTENDED RELEASE  
FERTILIZER COMPOSITIONS**

(71) Applicants: **Kenneth J. Boyce**, Fort Myers, FL (US);

(72) Inventors: **Kenneth J. Boyce**, Fort Myers, FL (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.: 13/915,239

(22) Filed: Jun. 11, 2013

**Related U.S. Application Data**

(60) Provisional application No. 61/657,955, filed on Jun. 11, 2012.

(51) **Int. Cl.**

C05D 9/02 (2006.01)  
C05F 11/00 (2006.01)  
C05F 11/02 (2006.01)  
C05B 7/00 (2006.01)  
C05B 17/00 (2006.01)  
A01N 25/00 (2006.01)

(52) **U.S. Cl.**

USPC ..... 71/24; 71/11; 71/27; 71/32; 71/64.07

(58) **Field of Classification Search**

USPC ..... 71/23-30  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,876,479 A \* 3/1999 Hedgpeth, IV ..... 71/11  
2002/0057947 A1 \* 5/2002 Schraven ..... 405/264

2002/0178772 A1 \* 12/2002 Hince ..... 71/31  
2011/0036009 A1 \* 2/2011 Bissonnette et al. .... 47/59 S  
2011/0152363 A1 \* 6/2011 Knochenmus et al. .... 514/494  
2011/0224080 A1 \* 9/2011 Lelas et al. .... 504/124

**OTHER PUBLICATIONS**

Outdoor Water Use. EPA. Environmental Protection Agency, May 2013. Web. Aug. 27, 2013. <http://www.epa.gov/watersense/pubs/outdoor.html>.

\* cited by examiner

*Primary Examiner* — Jennifer Smith

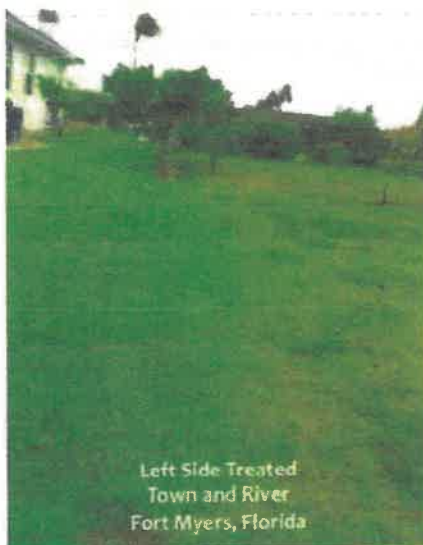
(74) *Attorney, Agent, or Firm* — Nilay Choksi; Smith & Hopen, P. A.

(57) **ABSTRACT**

A granule fertilizer composition with dethatching agent. The fertilizer composition includes natural potassium, various micronutrients, humic acid and composted humus. Ingredients of the composition may include humic acid, nitrogen, sulfur, potash, iron, manganese, magnesium, and/or inert ingredients. In an embodiment, each ingredient is polymer-coated, depending on the needs of the user. The current invention also enables a method of manufacturing a fertilizer composition, along with methods of fertilizing, dethatching and irrigating a finite area of turf using a fertilizer composition. The novel fertilizer composition is environmentally friendly, can be utilized year round effectively for warm and cool turf needs, increases water retention (i.e., reduces amount of irrigation needed), aids in micronutrient uptake, provides soil biology, and prevents staining on concrete.

**18 Claims, 17 Drawing Sheets**

**(17 of 17 Drawing Sheet(s) Filed in Color)**



The  
United  
States  
of  
America



**The Director of the United States  
Patent and Trademark Office**

*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

*Therefore, this*

**United States Patent**

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.*

*Michelle K. Lee*

*Deputy Director of the United States Patent and Trademark Office*

The K & K Super-Blend™, was developed as an exciting innovative, all natural, ECO-FRIENDLY and BIO-DEGRADABLE Fertilizer, the composition of which is totally organic and can be used year round, with no restrictions, satisfying various climates and soil needs

100% produced in Florida, USA, K & K Super-Blend™, contains natural potassium, important micronutrients, and humic acid/composted humus that increases water retention, eliminates thatch, may aid in micronutrient uptake and supports root growth. When properly applied, K & K Super-Blend™, acts as a soil conditioner, reducing the amount of irrigation time needed for your turf, thus saving water.

Our goal is to continue providing a 100% all-organic product to both the agricultural and commercial industries with a focus on preserving our environment for future generations. Please feel free to contact us with your questions and feedback. Help us support eco-friendly farming and sustainability worldwide.

Please contact Mr. Ken Boyce, Director of Global Business Development for more details.

[kksuperblend@comcast.net](mailto:kksuperblend@comcast.net)

<https://kksuperblend.wordpress.com/#:~:text=About%20K%20%26%20K,via%20phone%3A%20%C2%A01.239.470.2742>

## CON'T - NOTES PATENT INFORMATION – SELLING PATENT

- 4" CUTTING HEIGHT = NO WEEDS
- ATTY (SMITH) + HOPEN + PFLETCHER (SO. TAMPA)
- BILL OF SALE
- PATENT 500k + UP
- PROFIT → SELL TO HOMEOWNERS

NOTES PATENT INFORMATION - SELLING PATENT

PATENT IN SOLELY IN MY NAME - JANUARY 28, 2014

THE K & K LABEL CAN BE USED ONCE YOU HAVE THE PATENT

FIRST PATENT "EVER" TO BE IN COLOR - FOR THE UNIT STATES PATENT AND TRADEMARK OFFICE

28-Jan-14

INCLUDES NOT ONLY GRASS - BUT - ORCHIDS - PLANTS - TREES etc

HUMIC ACID CONTROLS THE MOISTURE IN EACH PLAN - EACH PARTICAL OF GRASS

BUGS DO NOT LIKE HUMIC ACID - SO YOU WILL CUT BACK ON SPRAYING

LARGE AMOUNTS OF WATERING WILL NOT BE NECESSARY TO HAVE GRASS 4"

PLANTS WILL ALSO NEED LESS WATERING

WHAT YOU WILL HAVE TO DO AFTER PURCHASING THE "PATENT"

1 - I WILL GIVE YOU INFORMATION ON HOW TO HAVE IT MADE PACIFICALL FOR YOU

2 - DETERMINE A FAIR & REASONABLE PRICE FOR EACH BAG PRICE FOR EACH HOME OWNER

3 - SHIPPING WILL DONE BY THEM TO YOU LOCATION, USUALLY A BUILDING TO STOCK THE FERTILIZER

4 - IT CAN BE PRODUCED IN 25lb BAG FOR CONVENIENCE

5 - I WOULD SUGGEST SELLING THE BAGS TO OTHER CITIES NEAR YOU

6 - USUALLY PARKS AND RECREATION AT EACH CITY HANDLES FERTILIZER

COMPANIES THAT USED THE FERTILIIZER - THAT YOU MAY BE ABLE TO SELL TO:

EDISON & FORD WINTER ESTATES - DEBBIE HUGHES IS THE CONTACT PERSON

GAVINS ACE HARDWARED HAD A LOT OF CUSTOMERS WHO PURCHASED THE PRODUCT - WITH (2) LOCATIONS

FORMULATING COMPANIES IN FLORIDA

ProPlus-Products - About Us

ProPlus Products | Golf Course Fertilizer | Lawn Fertilizer

Florida Supplement | Formulating | Manufacturing | Packaging

Humic Growth Solutions

*BEST Co.* → Wedgworth's Inc. *STERILE BINS*

Supplement Manufacturer, Florida, VRA FORMULATIONS LLC

MiramarLab | Custom formulation services | 2301 NW 107th Ave s

GLADES FORMULATING CORPORATION in Belle Glade, FL

Private Label - Florida Supplement | Formulating

Private Label Supplement Manufacturing in Florida