



US009408355B2

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

(10) **Patent No.:** **US 9,408,355 B2**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **PLANTS AND SEEDS OF HYBRID CORN VARIETY CH051647**

(71) Applicant: **Monsanto Technology LLC**, St. Louis, MO (US)

(72) Inventors: **L. John Frederickson**, Mason, MI (US); **Richard G. Stelpflug**, Cottage Grove, WI (US)

(73) Assignee: **Monsanto Technology LLC**, St. Louis, MO (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 487 days.

(21) Appl. No.: **13/900,285**

(22) Filed: **May 22, 2013**

(65) **Prior Publication Data**

US 2014/0351986 A1 Nov. 27, 2014

(51) **Int. Cl.**
A01H 5/10 (2006.01)

(52) **U.S. Cl.**
CPC **A01H 5/10** (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,658,085	A	4/1987	Beverdort et al.	
5,523,520	A	6/1996	Hunsperger et al.	
5,773,683	A	6/1998	Foley	
6,433,261	B2	8/2002	Hotchkiss	
6,693,232	B1	2/2004	Bergemann	
6,852,915	B2	2/2005	Johnson	
7,423,204	B1*	9/2008	Stelpflug	A01H 5/10 435/412
8,502,048	B2	8/2013	Olsen et al.	
8,519,220	B2	8/2013	Olsen	
2012/0266293	A1*	10/2012	Bergemann	C11B 1/00 800/263
2012/0278917	A1	11/2012	Bergemann et al.	
2012/0278918	A1	11/2012	Bergemann et al.	
2012/0278921	A1	11/2012	Bergemann et al.	
2014/0331350	A1*	11/2014	Popi	A01H 5/10 800/275

OTHER PUBLICATIONS

U.S. Appl. No. 13/452,649, filed Apr. 20, 2012, Faue et al.
U.S. Appl. No. 13/452,658, filed Apr. 20, 2012, Faue et al.

U.S. Appl. No. 13/452,815, filed Apr. 20, 2012, Faue et al.
U.S. Appl. No. 13/451,936, filed Apr. 20, 2012, Page.
U.S. Appl. No. 13/452,651, filed Apr. 20, 2012, Page.
U.S. Appl. No. 13/452,877, filed Apr. 21, 2012, Olsen.
U.S. Appl. No. 13/452,874, filed Apr. 21, 2012, Stangland et al.
U.S. Appl. No. 13/889,137, filed May 7, 2013, Boerboom.
U.S. Appl. No. 13/889,151, filed May 7, 2013, Boerboom.
U.S. Appl. No. 13/889,145, filed May 7, 2013, Page et al.
U.S. Appl. No. 13/891,127, filed May 9, 2013, Boerboom.
U.S. Appl. No. 13/898,121, filed May 20, 2013, Olsen.
U.S. Appl. No. 13/900,316, filed May 22, 2013, Boerboom.
U.S. Appl. No. 13/900,349, filed May 22, 2013, Page.
U.S. Appl. No. 13/906,911, filed May 30, 2013, Holland et al.
U.S. Appl. No. 13/906,153, filed May 30, 2013, Holland et al.
Eshed et al., "Less-than-additive epistatic interactions of quantitative trait loci in tomato," *Genetic*, 143:1807-1817, 1996.
Fehr (ed.), In: Principles of Cultivar Development, vol. 1: Theory and Technique, pp. 360-376, 1987.
Hallauer et al., "Corn breeding," In: Corn and Corn Improvement Sprague et al. (Eds.), Madison, Wisconsin, Ch. 8, pp. 463-564, 1988.
Kraft et al., "Linkage disequilibrium and fingerprinting in sugar beet," *Theor Appl Genet*, 101:323-326, 2000.
Krakowsky et al., "Quantitative trait loci for cell wall components in recombinant inbred lines of maize (*Zea mays* L.) II: leaf sheath tissue," *Theor Appl Genet* 112:717-726, 2006.
Larson et al., "Corn Production," In: Corn and Corn Improvement G.F. Sprague (Ed.), No. 18 in Agronomy Series, American Society of Agronomy, Inc., Madison, Wisconsin, pp. 625-669, 1977.
Meghji et al., "Inbreeding depression, inbred and hybrid grain yields, and other traits of maize genotypes representing three eras," *Crop Science*, 24:545-549, 1984.
Sprague et al., "Corn Breeding," In: Corn and Corn Improvements, G.F. Sprague (Ed.), No. 18 in Agronomy Series, American Society of Agronomy, Inc., Madison, Wisconsin, pp. 305-362, 1977.
Wych, "Production of hybrid seed corn," In: Corn and Corn Improvement, Sprague et al. (Eds.), Madison, Wisconsin, Ch. 9, pp. 565-607, 1988.
Variety specific information as indicated in transmittal letter of Sep. 24, 2013 Information Disclosure Statement for U.S. Appl. No. 13/900,285.

* cited by examiner

Primary Examiner — David H Kruse

Assistant Examiner — Russell Boggs

(74) *Attorney, Agent, or Firm* — Dentons US LLP

(57) **ABSTRACT**

According to the invention, there is provided seed and plants of the hybrid corn variety designated CH051647. The invention thus relates to the plants, seeds and tissue cultures of the variety CH051647, and to methods for producing a corn plant produced by crossing a corn plant of variety CH051647 with itself or with another corn plant, such as a plant of another variety. The invention further relates to genetic complements of plants of variety CH051647.

21 Claims, No Drawings