US009410162B1

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

(10) **Patent No.: US 9,410,162 B1**
(45) **Date of Patent: Aug. 9, 2016**

(54) **TRANSGENIC LEGUMES**

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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 211 days.

(21) Appl. No.: **13/950,149**

(22) Filed: **Jul. 24, 2013**

Related U.S. Application Data

(60) Provisional application No. 61/675,253, filed on Jul. 24, 2012.

(51) **Int. Cl.**
C12N 15/82 (2006.01)

(52) **U.S. Cl.**
CPC ***C12N 15/8271*** (2013.01); ***C12N 15/8241*** (2013.01)

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

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(57) **ABSTRACT**

Embodiments of the present invention comprise altering the biosynthesis and accumulation of sucrose in legumes by transforming the plants with the sucrose phosphate synthase (SPS) gene of maize, and closely related regulatory genes. Embodiments of the present invention further comprise altering the assimilation of nitrogen in legumes by transforming the plants with the glutamine synthetase (GS) gene of soybean, and closely related regulatory genes. Embodiments of the present invention further comprise transforming legume plants with both SPS and GS genes. In addition, embodiments of the present invention relate to enhancing expression of transgenes through the 5' UTR of the *glycine max* (soybean) cytosolic glutamine synthetase (Gmglnβ_1) gene.

4 Claims, 38 Drawing Sheets