US008945223B2

(12) **United States Patent**
Trieu

(10) **Patent No.: US 8,945,223 B2**
(45) **Date of Patent: Feb. 3, 2015**

(54) **IN-SITU FORMABLE NUCLEUS PULPOSUS IMPLANT WITH WATER ABSORPTION AND SWELLING CAPABILITY**

(75) Inventor: **Hai H. Trieu**, Cordova, TN (US)

(73) Assignee: **Warsaw Orthopedic, Inc.**, Warsaw, IN (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1696 days.

(21) Appl. No.: **11/072,971**

(22) Filed: **Mar. 7, 2005**

(65) **Prior Publication Data**

US 2005/0203206 A1 Sep. 15, 2005

(51) **Int. Cl.**

A61F 2/44	(2006.01)
A61B 17/16	(2006.01)
A61L 27/26	(2006.01)
A61L 27/50	(2006.01)

(Continued)

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

CPC ***A61F 2/442*** (2013.01); ***A61L 27/26*** (2013.01); ***A61L 27/50*** (2013.01); ***A61L 27/52*** (2013.01); *A61F 2002/30075* (2013.01); *A61F 2002/30131* (2013.01); *A61F 2002/30594* (2013.01); *A61F 2002/30596* (2013.01); *A61F 2002/30677* (2013.01); *A61F 2002/3082* (2013.01); *A61F 2002/444* (2013.01); *A61F 2210/0061* (2013.01); *A61F 2230/0013* (2013.01); *A61L 2400/06* (2013.01); *A61L 2430/38* (2013.01)

USPC **623/17.12**; 128/898; 606/151

(58) **Field of Classification Search**

CPC A61F 2/00; A61F 5/00; A61F 9/00; A61F 13/00; A61F 2002/00; A61F 2210/00; A61F 2220/00; A61B 1/00; A61B 7/00; A61B 2010/00; A61B 2217/00; A61B 2218/00; A61L 2/00; A61L 15/00; A61L 2202/00; A61L 2209/00

USPC 623/17.11–17.17

See application file for complete search history.

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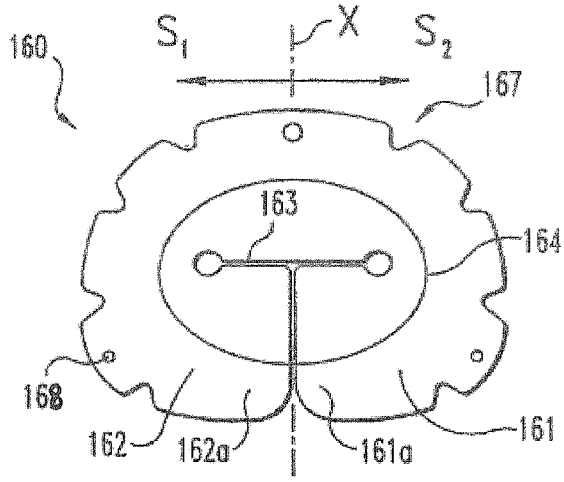
Primary Examiner — David Isabella
Assistant Examiner — Ann Schillinger
(74) *Attorney, Agent, or Firm* — Sorell Lenna & Schmidt LLP

(57) **ABSTRACT**

Embodiments of the invention relate to a curable nucleus pulposus implant having water absorption and swelling capabilities, compositions for producing the curable nucleus pulposus implants, and methods of using the curable nucleus pulposus implants. The curable nucleus pulposus implant can be created from a polymer blend composition comprising a ratio of a curable material and at least one hydrophilic polymer. The resulting polymer blend composition may be used to generate curable nucleus pulposus implants to treat a number of disease and/or disorders, such as herniated discs. The curable nucleus pulposus implants may further contain polyelectrolytes and elastomer compounds, as well as pharmacological and biological agents.

34 Claims, 3 Drawing Sheets