US009636211B2

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

(10) **Patent No.: US 9,636,211 B2**
(45) **Date of Patent: May 2, 2017**

(54) **ABSORBABLE IMPLANTS FOR PLASTIC SURGERY**

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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 0 days.

(21) Appl. No.: **14/813,454**

(22) Filed: **Jul. 30, 2015**

(65) **Prior Publication Data**

US 2016/0022416 A1 Jan. 28, 2016

Related U.S. Application Data

(63) Continuation of application No. 14/329,760, filed on Jul. 11, 2014.

(Continued)

(51) **Int. Cl.**
A61F 2/12 (2006.01)
A61L 27/50 (2006.01)

(Continued)

(52) **U.S. Cl.**
CPC ***A61F 2/12*** (2013.01); ***A61F 2/0063*** (2013.01); ***A61L 27/50*** (2013.01); ***A61L 27/56*** (2013.01);

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(58) **Field of Classification Search**
CPC A61F 2/12

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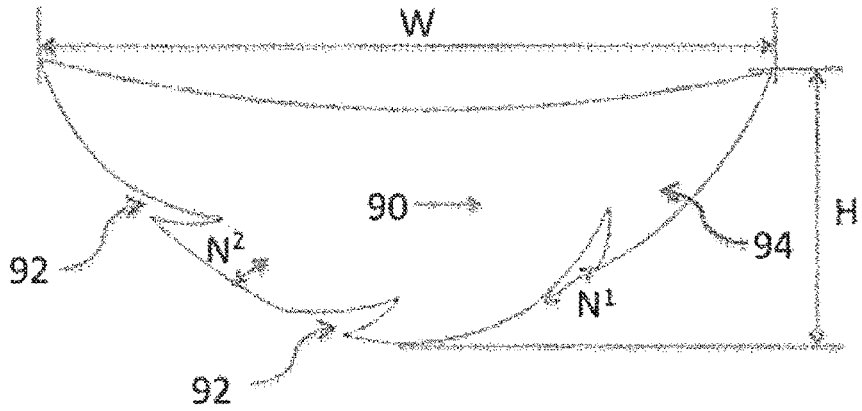
(57) **ABSTRACT**

Absorbable implants for breast surgery that conform to the breast parenchyma and surrounding chest wall have been developed. These implants support newly lifted breast parenchyma, and/or a breast implant. The implants have mechanical properties sufficient to support a reconstructed breast, and allow the ingrowth of tissue into the implant as it degrades. The implants have a strength retention profile allowing the support of the breast to be transitioned from the implant to regenerated host tissue, without significant loss of support. Three-dimensional implants for use in minimally invasive mastopexy/breast reconstruction procedures are also described, that confer shape to a patient's breast. These implants are self-reinforced, can be temporarily deformed, implanted in a suitably dissected tissue plane, and resume their preformed three-dimensional shape. The implants are preferably made from poly-4-hydroxybutyrate (P4HB) and copolymers thereof. The implants have suture pullout strengths that can resist the mechanical loads exerted on the reconstructed breast.

34 Claims, 8 Drawing Sheets