Claim Differentiation Does Not Broaden Claims Beyond Their Correct Scope

"[W]e agree with the district court that the written description and prosecution history overcome any presumption arising from the doctrine of claim differentiation. . . [C]laim differentiation only creates a presumption that each claim in a patent has a different scope; it is 'not a hard and fast rule of construction.' '[C]laim differentation can not broaden claims beyond their correct scope.'"

Kraft Foods, Inc. v. Int'l Trading Co., 203 F.3d 1362, 1368 (Fed. Cir. 2000) (citations omitted).

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ALL OTHER ASSERTED CLAIMS OF THE '888 AND '404 PATENTS DEPEND FROM CLAIM 1 AND THEREFORE ALSO REQUIRE A BALLOON

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CLAIM CONSTRUCTION OF THE '043 PATENT

Independent Claims 2 and 17

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All Claims of the '043 Patent Require a Balloon

Claim 2, with disputed terms in bold:

2. A method for treating bone comprising the steps of

inserting inside bone a device comprising **a body adapted to be inserted into bone and undergo expansion** in cancellous bone to compact cancellous bone, including **the body** includes material material that, during the expansion in the cancellous bone, applies a force capable of moving fractured cortical bone, and further **includes an internal restraint coupled to an interior of the body to constrain the expansion** in cancellous bone,

causing constrained expansion of the body in the cancellous bone, and

compacting cancellous bone by the constrained expansion.

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CLAIM CONSTRUCTION
Claim 2 of the '043 Patent
DOT's Proposed Construction

- a body adapted to be inserted into bone and undergo expansion → an inflatable body that can be inserted into bone and expanded
- the body. . . includes an internal restraint coupled to an interior of the body to constrain the expansion → a structure that is connected to the interior of the inflatable body (balloon) that limits movement of the internal walls of the inflatable body
- causing constrained expansion of the body → constraining the expansion of the inflatable body

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CLAIM CONSTRUCTION
Claim 2 of the '043 Patent
DOT's Proposed Construction

- compacting cancellous bone by the constrained expansion → using an inflatable body to form a void in the interior of a bone, where the expansion of the inflatable body is restrained by a structure connected to the interior of the inflatable body that limits movement of the internal walls of the inflatable body.

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All Claims of the '043 Patent Require a Balloon

Intrinsic Evidence - entirely focused on improvements to the balloons disclosed in the '888 and '404 Patents:

- Abstract
- Background of Invention
- Summary of Invention
- Figures
- Title

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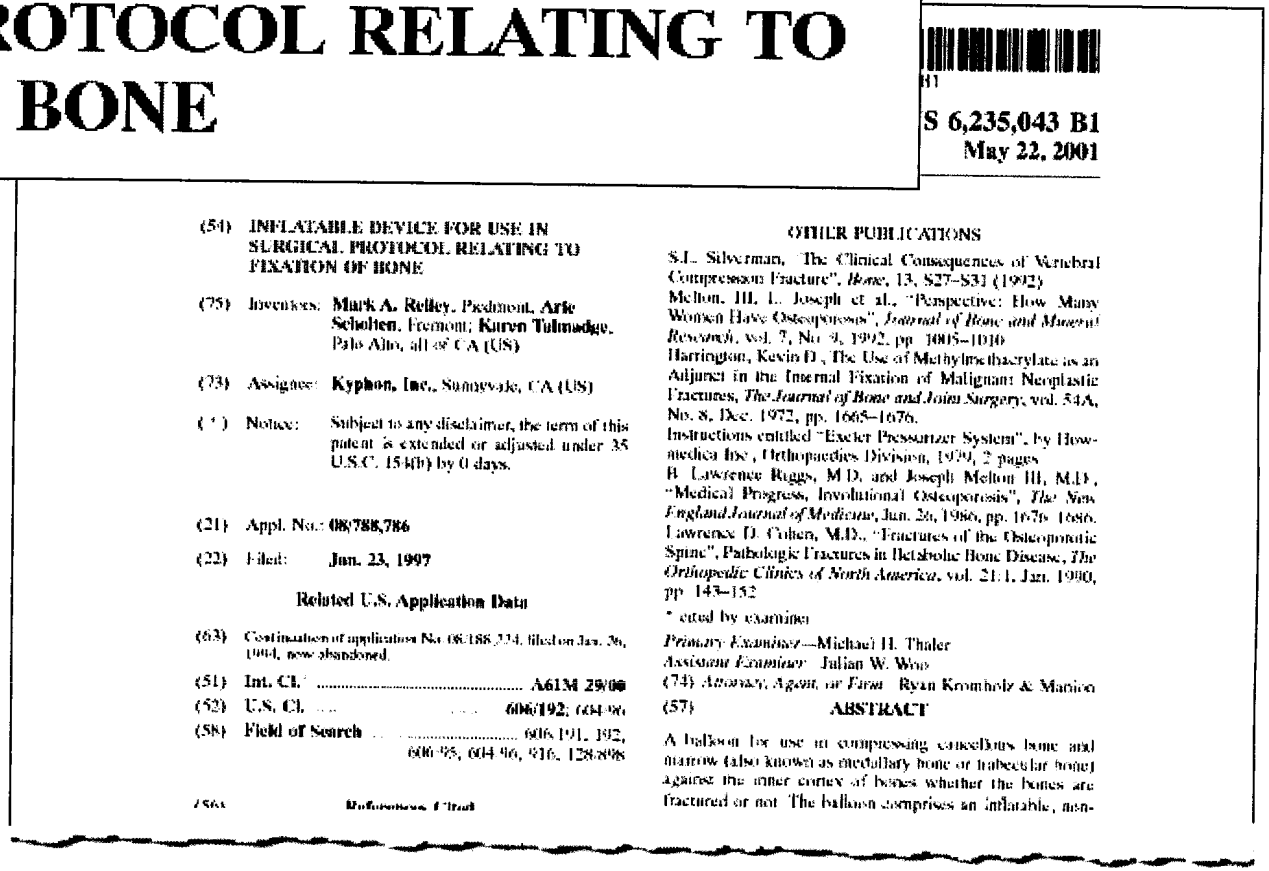
The Principles of Bard Are Equally Applicable to the '043 Patent

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All Claims of the '043 Patent Require a Balloon

INFLATABLE DEVICE FOR USE IN SURGICAL PROTOCOL RELATING TO FIXATION OF BONE

Title of Invention:



US 6,235,043 B1
May 22, 2001

(54) INFLATABLE DEVICE FOR USE IN SURGICAL PROTOCOL RELATING TO FIXATION OF BONE

(75) Inventors: Mark A. Reiley, Piedmont, Arie Scholten, Fremont; Kurvn Tallmadge, Palo Alto, all of CA (US)

(73) Assignee: Kyphon, Inc., Sunnyvale, CA (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.: 08/788,786

(22) Filed: Jan. 23, 1997

Related U.S. Application Data

(63) Continuation of application No. 08/188,334, filed on Jan. 26, 1994, now abandoned.

(51) Int. Cl.[7] A61M 29/00

(52) U.S. Cl. 606/192; 604/96

(58) Field of Search 606/191, 192, 606/95, 604/96, 916, 128/898

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Assistant Examiner—Julian W. Woo
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(57) ABSTRACT

A balloon for use in compressing cancellous bone and marrow (also known as medullary bone or trabecular bone) against the inner cortex of bones whether the bones are fractured or not. The balloon comprises an inflatable, non-

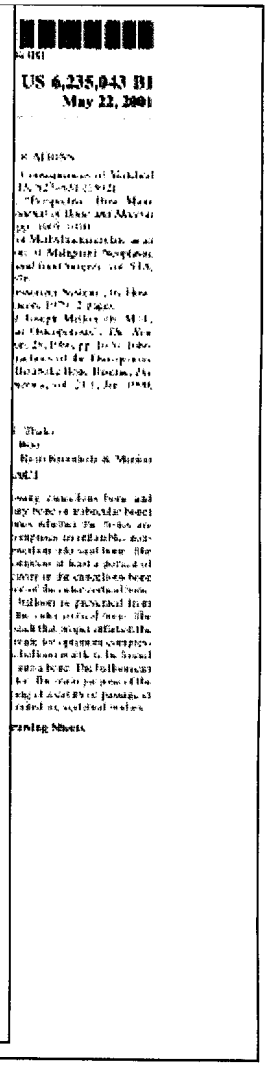
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All Claims of the '043 Patent Require a Balloon

Abstract:

(57) **ABSTRACT**

A balloon for use in compressing cancellous bone and marrow (also known as medullary bone or trabecular bone) against the inner cortex of bones whether the bones are fractured or not. The balloon comprises an inflatable, non-expandable balloon body for insertion into said bone. The body has a shape and size to compress at least a portion of the cancellous bone to form a cavity in the cancellous bone and to restore the original position of the outer cortical bone, if fractured or collapsed. The balloon is prevented from applying excessive pressure to the outer cortical bone. The wall or walls of the balloon are such that proper inflation the balloon body is achieved to provide for optimum compression of all the bone marrow. The balloon is able to be folded so that it can be inserted quickly into a bone. The balloon can be made to have a suction catheter. The main purpose of the balloon is the forming or enlarging of a cavity or passage in a bone, especially in, but not limited to, vertebral bodies.


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