

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: James E. Jervis
U.S. Patent No.: 6,306,141
Issue Date: October 23, 2001
Serial No.: 08/483,291
Filing Date: June 7, 1995
Title: MEDICAL DEVICES INCORPORATING SIM ALLOY
ELEMENTS

Submitted via Electronic Filing

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**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NUMBER 6,306,141 UNDER 35 U.S.C. §§ 311-319**

Lombard Medical Technologies PLC (“Lombard” or “Petitioner”) hereby requests *Inter Partes* Review (“IPR”) of Claims 1-10 and 18-22 in U.S. Patent Number 6,306,141 (“141 patent”) (**Exhibit 1001**). A detailed statement supporting the petition follows.

The requisite fee accompanies this request. If any additional fee is necessary the Director is authorized to charge Deposit Account No. 16-0605. This document, together with all exhibits referenced herein, has been served on the patent owner at the address of record for the 141 patent, as well as on the counsel of record for the 141 patent, as reflected in the accompanying Certificate of Service.

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST UNDER 37 C.F.R. § 42.8(b)(1)1

II. GROUNDS FOR STANDING UNDER 37 C.F.R. § 42.104(a)1

III. RELATED MATTERS UNDER 37 C.F.R. § 42.8(b)(2).....1

**IV. DESIGNATION OF COUNSEL UNDER 37 C.F.R. § 42.8(b)(3)
and 42.10(a)-(b)1**

V. SERVICE INFORMATION UNDER 37 C.F.R. § 42.8(b)(4)1

**VI. STATEMENT OF PRECISE RELIEF REQUESTED UNDER
37 C.F.R. §§ 42.22(a)(1) and 42.104(b)(1)-(2)2**

**VII. HOW THE CHALLENGED CLAIMS ARE TO BE
CONSTRUED UNDER 37 C.F.R. § 42.104(b)(3).....3**

**VIII. REASONS FOR THE RELIEF REQUESTED UNDER 37 C.F.R.
§ 42.22(a)(2) and 42.104(b)(4) SHOWING THAT THERE IS A
REASONABLE LIKELIHOOD THAT THE PETITIONER
WILL PREVAIL UNDER 35 U.S.C. § 314(a)3**

A. Subject Matter of the 141 Patent4

**B. Prosecution History Of The 141 Patent: Issuance Based On
a False Representation Of The Properties Of Nitinol.....6**

**C. The IPR Claims are Obvious in view of Balko, Kirk-
Othmer, and Foster under § 103(a)12**

D. The IPR Claims are Anticipated by Dotter under § 102(e)22

E. Claims 6-10 are Obvious in view of Dotter under § 103(a).....30

**F. Claims 1-5 and 18-22 are Anticipated by Cragg under §
102(a)31**

**G. Claims 1-5 and 18-22 are Obvious In View of Miyauchi &
Cragg under § 103(a)37**

H.	Claims 6-10 are Obvious in view of Dotter & Miyauchi	
	under § 103(a).....	43
I.	The IPR Claims are Invalid For Obvious-Type Double	
	Patenting.....	46
i.	The IPR Claims Are Obvious Variants of Claims in	
	the '378 Patent.....	47
ii.	The IPR Claims Are Not Entitled to Safe Harbor.....	53
IX.	CONCLUSION.....	59

EXHIBIT LIST

- 1001** U.S. Patent No. 6,306,141 to Jervis
- 1002** U.S. Patent No. 4,512,338 to Balko et al.
- 1003** Schetky, *Shape Memory Alloys*, Kirk-Othmer Encyclopedia of Chemical Technology, Vol. 20 726-736 (3d Ed. 1982)
- 1004** U.S. Patent No. 4,503,569 to Dotter
- 1005** A. Cragg *et al.*, *Nonsurgical Placement of Arterial Endoprostheses: A New Technique Using Nitinol Wire*, Radiology, Vol. 147: 261-263 (April 1983)
- 1006** Japanese Patent Publication No. S58-46923 (filed Sept. 12, 1981; disclosed Mar. 18, 1983) to Miyauchi et al.
- 1007** Certified Translation of Japanese Patent Publication No. S58-46923 to Miyauchi et al.
- 1008** U.S. Patent No. 5,597,378 to Jervis
- 1009** Declaration of Scott M. Russell
- 1010** Curriculum Vitae of Scott M. Russell
- 1011** U.S. Patent No. 4,307,723 to Finney
- 1012** Prosecution History of U.S. Patent No. 6,306,141
- 1013** Prosecution History of U.S. Patent No. 5,597,378
- 1014** U.S. Patent No. 4,485,805 to Foster
- 1015** Certified Transcript of Deposition of Dr. Lee Middleman, Dec. 10-11, 2008.
- 1016** Inherent Properties Video Presentation by Mr. Scott M. Russell

- 1017** Double Patenting Video Presentation (Part 1) by Mr. Scott M. Russell
- 1018** C. Dotter et al., *Transluminal Expandable Nitinol Coil Stent Grafting: Preliminary Report*, Radiology, Vol. 147: 259 (April 1983)
- 1019** Otsuka et al., *Pseudoelasticity*, 4 Metals Forum No. 3, 142 (Aus. Inst. of Metals 1981)
- 1020** Delaey, et al., *Thermoelasticity, pseudoelasticity and the memory effects associated with martensitic transformations. Part 1: Structural and microstructural changes associated with the transformations*, 9 Journal of Materials Science 1521 (1974)
- 1021** Krishnan, et al., *Thermoplasticity, pseudoelasticity and the memory effects associated with martensitic transformations. Part 2: The macroscopic mechanical behavior*, 9 Journal of Materials Science 1536 (1974)
- 1022** U.S. Patent No. 3,890,977 to Wilson
- 1023** European Patent Publication No. 0129634 to Drettner
- 1024** Canadian Patent No. 1001034 to McWhorter
- 1025** U.S. Patent No. 4,401,433 to Luther
- 1026** Double Patenting Video Presentation (Part 1) by Mr. Scott M. Russell
- 1027** Kauffman et al., *The Story of Nitinol: The Serendipitous Discovery of the Memory Metal and Its Applications*, Vol. 2, No. 2 The Chemical Educator 1, 4-6
- 1028** Ling et al., *Phase Transitions and Shape Memory in NiTi*, 11A Metallurgica Transactions A 77, 77-79 (1980)
- 1029** Schetky, *Shape-Memory Alloys*, 241:5 Scientific American 74-82 (November 1979)
- 1030** Patel et al., *Criterion for the Action of Applied Stress in the Martensitic Transformation*, 1 Acta Metalurgica 531-538 (1953)

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