EXHIBIT 1
TO
DECLARATION OF DR. CARL H. JACOBS IN SUPPORT OF STRYKER CORPORATION'S OPPOSITION TO SYNVASIVE'S MOTION FOR PARTIAL SUMMARY JUDGMENT OF INFRINGEMENT OF THE '353 AND '253 PATENTS

CARL H. JACOBS, PH.D.

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VP Manufacturing/Engineering & Operations ♦ VP Research & Development ♦ Medical Device Consulting

Senior medical device industry leader with a proven track record of success directing manufacturing operations, research, development and technology transfer. Coordinated new product transfers from R&D to production on several different occasions for major orthopaedic and cardiology sector organizations. Experienced dealing with physician product champions and clients. Strong operational and technical background coupled with effective leadership skills and the ability to build strong cross-functional relationships.

AVNEI DERECH CONSULTING
Teaneck, NJ
2003 – Present

- Biomaterial and Medical Device Manufacturing Consulting Organization performing Operational and Quality System development work and investment due diligence assessments.
- Client list includes:
  - Genesis Medical, LLC Cherry Hill, NJ;
  - Impliant, Ltd, Ramot Poleg, Israel;
  - Meadow Brothers & Co., LLC, Investment Bankers, Chicago, Il,
  - Novamin, Gainesville, Fl.
  - Urovalve, Inc, Newark, NJ, Member Scientific Advisory Board
  - NanoVibronix, Inc., Nesher, Israel, Chief Operating Officer
  - ALung Technologies, Pittsburgh, PA, VP Manufacturing
  - Adeza Biomedical, Sunnyvale, California
  - JNJ Ethicon, Cincinnati, Ohio

DATASCOPE CORP.
Vice-President, Operations and Engineering & Managing Director,
Montvale, NJ
Bioplex Medical, B.V., Vaals, The Netherlands
1993 - 2003

- Company manufactures bovine derived collagen hemostats for cardiology/surgical applications.
- Directed all phases of domestic and international manufacturing operations for the Division including manufacturing and packaging engineering, production planning, warehousing, distribution, automation, vendor supply agreements, international shipping (export/import), cost control, product sterilization and microbiological validations. Direct staff 5; total operations staff 45; annual budget $4.5 million.
- Coordinated and manage Divisional ISO-9000 and CE Mark.

- Reduced production lead times from 16 weeks to three. Increased capacity tenfold, reducing standard costs by 50%. Improved productivity by 65% and reduced scrap by 90%.
- Initiated MRP and MRPII systems. Instituted worldwide Distribution Center, Bar Code integrated financial/operations reporting system and Cellular Manufacturing Concepts.
- Completely renovated manufacturing center clean-rooms (class 10,000) while maintaining production build for new product launch.
- Coordinated and responsible for efforts to supply raw materials from New Zealand rather than Europe in response to public health concerns.
- Designed and supervised construction of US Manufacturing center (clean-rooms, laboratory facilities, engineering facilities, warehousing and production support areas).
- Coordinated and responsible for the closure of the Bioplex Medical Facility in The Netherlands, resulting in first year savings of $1.3 million
- Coordinated and responsible for total transfer of Operations from Europe to the United States:
- Coordinated the design and responsible for a second $2 million facility renovation to relocate the operation, technology and processes from the European Facility.

OSTEONICS, Division of STRYKER Corp, Manufacturer of Orthopaedic Implant Systems
Allendale, NJ
Director, Quality Assurance
1991 - 1992

- Managed all Quality Assurance activities. Member of Operations Steering Team. Managed staff of 25. Annual budget $5 million. Reduced lead-time through major revamp of cGMP required record keeping system. Coordinated clean room facility modifications to reduce lead-times.
- Developed cost of quality and scrap analysis reporting programs and systems.

ORTHOMET, Manufacturer of Orthopaedic Implant systems
Minneapolis, MN
Vice-President, Manufacturing Operations
1989 - 1991

- Direct all aspects of manufacturing of orthopaedic implant devices including material management, manufacturing, industrial engineering and production. Total staff of 68. Annual budget $3.5 million.
- Increased production by 40% over 12 months without increasing raw material or work-in-process inventory levels.
- Spearheaded manufacturing effort to bring major new product design to production status in less than 100 days.
- Negotiated and developed long term purchasing agreements with casting vendors to assure stable pricing, consistent delivery and quality.

ZIMMER ORTHOPAEDIC IMPLANT DIVISION,
Warsaw, IN. Division of Bristol-Myers Squibb, Manufacturer of Orthopaedic Implant systems
1983 - 1989
Director, Research Laboratories
Director, Research Laboratories and Quality Assurance
Director, Materials Processing

- Initially directed material testing research and development laboratory. Activities extended to include the Quality Assurance, Quality Control and Microbiology laboratory activities with combined staff of 135 and an annual budget of $6.2million.
- Coordinated the writing of in-house material specifications in support of manufacturing, QA/QC and purchasing in conjunction with the editing of a Materials Reference guide for use by design engineers.
- Coordinated project team which commercialized ion implantation of titanium bearing surfaces for orthopaedic applications.
- Coordinated and managed the construction of a new microbiology facility to allow for greater use of dosimetric release of sterile product.
- Expert witness deposition/testimony activities in support of corporate legal defense work
- International manufacturing trouble-shooting and technical sales support.

HOWMEDICA, Division of Pfizer Inc.
Groton, CT
Group Leader, Materials Characterization
1979 - 1983

GEORGIA INSTITUTE OF TECHNOLOGY, School of Mechanical Engineering
Atlanta, GA
Assistant Professor
1974 - 1979

EMORY UNIVERSITY Rehabilitation Medicine Department
Atlanta, GA Adjunct Clinical Assistant Professor
1977 - 1979

PATENTS

- Attachment Mechanism for Porous Coatings (U.S. Patent #5,080,674)
- Femoral Canal Cement Pressurizer (U.S. Patent #4,462,394)
- Centering Cap for Prosthetic Hip Stem (U.S. Patent #D339,865)

SKILLS

Operational Strategic and Tactical Planning	FDA/cGMP-ISO/CEMark Implementation
Certified QES Instructor; Phil Crosby Assoc.	Kepner-Tregoe Problem Solving Methodologies
Clean Room Design, Qualification,	Textile Manufacturing Processes

Clean Room Validation and Operations	InternationalRegulatory Submissions
Medical Packaging Design and Testing	Sterilization Methodologies & Validation
Collagen Manufacturing Processing	CRP, MRP and MRPII

Computer Skills: Excel, Lotus, Word, Word Perfect, PowerPoint

PROFESSIONAL AFFILIATIONS

- American Society of Mechanical Engineers
- Orthopaedic Research Society
- Society of Biomaterials
- American Society for Testing and Materials (F-4)

EDUCATION

UNIVERSITY OF VERMONT, BURLINGTON, VERMONT

- **Bachelor of Science Mechanical Engineering**
- **Master of Science, Department of Mechanical Engineering**
- **Doctor of Philosophy, Department of Mechanical Engineering**