

**MDPO Frame System**  
**510(k) Summary**  
**K093753**

**Device Manufacturer:** MDPO LLC  
1560 Sawgrass Corporate Pkwy  
Suite 400  
Sunrise, FL 33323

AUG 26 2010

**Primary Contact:** **Marcos Velez-Duran**  
**M Squared Associates, Inc.**  
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**Proprietary Name:** MDPO Frame System

**Classification Name:** 888.3030 Single/multiple component metallic bone fixation appliances and accessories

**Common Name:** External Fixation Frame Components

**Device Class:** Class II

**Product Codes:** KTT and JDW

**Device Description and Intended Use:**

The MDPO Frame System is an external fixation system that can be made into various configurations for lower limb application. The MDPO Frame System includes the following components: Half Pins, Wires, Footplate consisting of the Connecting Plate/Assembly with interchanging Medial and Lateral Arch Plates/Assemblies, Matching Rings, Open Rings, Closed Circular Rings, Columns, Threaded Rods, Sockets, Screws, Bolts, Nuts, Washers, Posts, and Cubes.

The components of the MDPO Frame System are made from stainless steel, carbon fiber, Radel or aluminum.

All components are designed for single use only.

The MDPO Frame System is indicated for use in the lower extremity for: open and closed long bone fracture fixation, to include tensioned wire fixation of periarticular fractures, arthrodesis, osteotomy, reconstruction, non-unions, pseudoarthrosis, correction of bony or soft tissue defects and deformities, dislocations, arthrodiastasis, and Charcot foot reconstruction and Lisfranc dislocations.

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**Predicate Devices:**

The MDPO Frame System is similar to several predicates including the following:

- Smith & Nephew Ilizarov External Fixation System (K870961, K962808, K994143)
- DePuy ACE-Fischer External Fixation System (K083789)
- Biomet Vision FootRing System (K071395, K093057)

**Technological Characteristics**

The MDPO Frame System was characterized and evaluated according applicable requirements outlined in ASTM F1541-02 (2007), Standard Specification and Test Methods for External Fixation Devices and the FDA Reviewers Guidance Checklist for Orthopedic External Fixation Devices. Specifically, construct fatigue testing and in-plane compression strength testing were conducted. Construct fatigue testing was conducted on the MDPO Frame System and the Ilizarov External Fixation System and it was determined that the MDPO Frame System was at least equivalent in strength to the Ilizarov External Fixation System. In-plane compression strength testing of the simple bridge ring elements was also conducted on both the MDPO Frame System and the Ilizarov External Fixation System. The strength testing also confirmed that the MDPO Frame System is at least equivalent to the Ilizarov External Fixation System.

**Substantial Equivalence Information:**

The MDPO Frame System is similar to legally marketed devices including the Smith & Nephew Ilizarov External Fixation System, DePuy ACE-Fischer External Fixation System, and the Biomet Vision FootRing System. The MDPO Frame System has similar indications for use and technological characteristics as these predicate systems. While MDPO Frame System includes stainless steel Rods and Radel Columns and the predicate systems utilize stainless steel rods, construct fatigue testing confirmed that the Radel Columns are substantially equivalent to the Ilizarov stainless steel rods. Therefore, the MDPO Frame System is determined to be substantially equivalent to the predicate devices.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room W-066-0609  
Silver Spring, MD 20993-0002

MDPO, LLC  
% M Squared Associates, Inc.  
Mr. Marcos Velez-Duran  
901 King Street, Suite 200  
Alexandria, Virginia 22314

AUG 26 2010

Re: K093753

Trade/Device Name: MDPO Frame System

Regulation Number: 21 CFR 888.3030

Regulation Name: Single/Multiple component metallic bone fixation appliances and accessories

Regulatory Class: Class II

Product Code: KTT, JDW

Dated: July 12, 2010

Received: July 13, 2010

Dear Mr. Velez-Duran:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

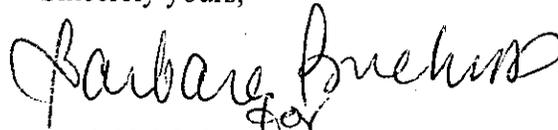
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device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in cursive script that reads "Barbara Puchner". There is a small "for" written below the signature.

Mark N. Melkerson

Director

Division of Surgical, Orthopedic  
and Restorative Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Indications for Use Statement

K093753

510(k) Number: K093753

Device Name: MDPO Frame System

Indications for Use:

The MDPO Frame System is indicated for use in the lower extremity for: open and closed long bone fracture fixation, to include tensioned wire fixation of periarticular fractures, arthrodesis, osteotomy, reconstruction, non-unions, pseudoarthrosis, correction of bony or soft tissue defects and deformities, dislocations, arthrodiastasis, and Charcot foot reconstruction and Lisfranc dislocations.

Prescription Use  X  AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

*[Signature]*  
(Division Sign-off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

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