

K061284

JUL - 3 2006

510 (k) Summary

Submitters Information

<u>Name:</u>	Imaging Sciences International Inc.
<u>Address:</u>	1910 North Penn Road Hatfield PA, 19440
<u>Phone Number:</u>	215-997-5666
<u>Fax Number:</u>	215-997-5665
<u>Person To Contact:</u>	David W. Cowan Vice President of Engineering, Quality Assurance and Government Compliance
<u>Date Of Summary:</u>	May 05, 2006
<u>Trade Name Of The Device:</u>	i-CAT Scanner
<u>Common Or Usual Name:</u>	Extraoral Source X-ray System
<u>Classification Name:</u>	Extraoral Source X-ray System

Substantial Equivalence Claim: The Imaging Sciences International Inc. i-CAT Scanner is substantially equivalent to the devices listed below:

Device: NewTom QR – DVT 9000
Manufacturer: NIM s.r.l.
Via Silverstrini, 20
37135 Verona
Italy
510 (k) Number: K003787

Device: 3D Accu-I-tomo XYZ Slice View Tomograph
Manufacturer: J. Morita Manufacturing Corporation
680 Higashihama Minami-cho, Fushimi-ku
Japan
510 (k) Number: K030450

Description Of The Device: The i-CAT Scanner is a dedicated X-Ray imaging device that acquires a 360 degree rotational X-ray sequence, reconstructs a three-dimensional matrix of the examined volume and produces two dimensional views of this volume. The i-CAT Scanner can measure distances and thickness on two dimensional images. Images produced by the i-CAT Scanner can be printed or exported on magnetic and optical media.

The i-CAT Scanner gantry is comprised of an X-ray source, image detector, and motorized gantry. The gantry facilitates the acquisition of a full X-ray sequence by the software. The software receives the two dimensional images acquired by the detector, transforms them into three dimensional images and displays them on the workstation monitor for viewing.

Intended Use Of The Device: The Imaging Sciences International Inc. i-CAT Scanner constructs a three dimensional model from images taken during a rotational X-ray sequence. The Imaging Sciences i-CAT Scanner is intended to be used whenever a dentist, oral surgeon, or other physician needs 3D information of high contrast objects. The system is designed for imaging of TM Joint studies, mandible & maxilla for implant planning, sinuses, and other areas of the maxillofacial complex.

Comparison with Predicate Devices: The i-CAT Scanner reconstructs a three dimensional model from X-ray images similar to the model obtained using the predicate devices. It displays either two-dimensional cross-sections or three dimensional views and allows the user to take measurements on reconstructed images.

Conclusions: The i-CAT Scanner Acquires an X-ray rotational sequence and provides three-dimensional information on the analyzed volume. The potential hazards (e.g. electrical, mechanical, thermal, radiation, incorrect measurements or misdiagnosis) are controlled by the design development, verification and validation process which includes a risk management system.

The i-CAT Scanner complies with the requirements of 21 CFR 807.87 and does not pose any new safety risks or effectiveness issues.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration
9200 Corporate Blvd.
Rockville MD 20850

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Mr. David W. Cowan
Vice President of Engineering, Quality Assurance
and Government Compliance
Imaging Sciences International, Inc.
1910 North Penn Road
HATFIELD PA 19440

Re: K061284
Trade/Device Name: i-CAT Scanner
Regulation Number: 21 CFR 872.1800
Regulation Name: Extraoral source x-ray system
Regulatory Class: II
Product Code: MUH
Dated: May 5, 2006
Received: May 9, 2006

Dear Mr. Cowan:

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.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such 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.



Protecting and Promoting Public Health

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); 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.

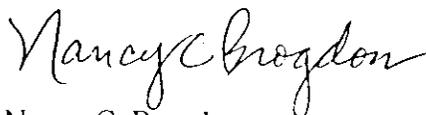
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 894.xxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). 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 (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon
Director, Division of Reproductive,
Abdominal, and Radiological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K061284

Device Name: i-CAT Scanner

Indications For Use: The Imaging Sciences International Inc. i-CAT Scanner constructs a three dimensional model from images taken during a rotational X-ray sequence. The Imaging Sciences i-CAT Scanner is intended to be used whenever a dentist, oral surgeon, or other physician needs 3D information of high contrast objects. The system is designed for imaging of TM Joint studies, mandible & maxilla for implant planning, sinuses, and other areas of the maxillofacial complex.

Prescription Use X
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use _____
(21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Manoj Kumar
(Division Sign-Off)
Division of Reproductive, Abdominal,
and Radiological Devices
510(k) Number K061284