K072998
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510(k) Summary of Safety and Effectiveness

This 510(k) summary of Safety and Effectiveness information is submitted in accordance with the requirement of 21 CFR Part 807.87(h).

Submitter:

Name:	GE Medical Systems, LLC 3200 N. Grandview Blvd., W-827 Waukesha, WI 53188
Contact:	Mark M. Stauffer MR Safety and Regulatory Engineer Tel: 262-521-6891 Fax: 262-521-6439
Date Prepared:	August 9, 2007

Product Identification:

Proprietary Device Name:	IDEAL Software Option for GE Signa MR Scanners
Common Name:	Software Option for Magnetic Resonance Imaging System
Classification Name:	System, Nuclear Magnetic Resonance Imaging (21 CFR 892.1000, Product Code LNH)

Predicate Device(s):

GE 1.5T and 3.0T Signa HDx MR Systems	K052293

Device Description:

The IDEAL Software Option is a software only product for use on GE Signa MR scanners.

To improve the separation between fat and water, the IDEAL technique acquires three measurements of IDEAL echoes to resolve fat, water and the magnetic field variations. The IDEAL processing produces four images from the IDEAL echoes: a water image, a fat image, a combined water plus fat image, and a combined water minus fat image. This process helps achieve uniform fat suppression and reduce chemical shift artifacts.

Intended Use:

IDEAL is a software option intended for use on GE Signa MR systems. It is indicated for magnetic resonance imaging of the musculoskeletal, breast, abdominal, and neurological systems of the human body.

IDEAL is an acquisition and reconstruction method that simultaneously obtains independent images of nuclei that resonate at different frequencies. IDEAL provides uniform tissue separation, reduces chemical shift artifacts, and minimizes the effects of magnetic field inhomogeneities. The IDEAL method provides higher image quality relative to chemically selective fat saturation techniques and STIR. Specific tissue for separation may include water and fat.

When used with a GE Signa MR system, IDEAL is capable of producing transverse, sagittal, coronal, and oblique images of internal structures of the body, including but not limited to, the musculoskeletal, abdominal, and neurological systems. Specific anatomical regions that may be imaged include the cervical-spine, joints, and extremities. The independent images produced from IDEAL may be added or subtracted for tissue delineation.

The images reflect the spatial distribution of nuclei exhibiting magnetic resonance. The NMR properties that determine the image appearance are proton density, molecular environment, spin-lattice relaxation time (T1), spin-spin relaxation time (T2), and flow.

When interpreted by a trained physician, these images provide information that can be useful in determining a diagnosis.

Comparison with Predicate:

The IDEAL Software Option is substantially equivalent to an analogous feature currently marketed in the GE 1.5T and 3.0T Signa HDx MR Systems (K052293).

Conclusion:

When used in conjunction with a GE Signa MR System, the IDEAL Software Option represents an evolutionary change in fat and water separation methodology. This premarket notification submission demonstrates that the IDEAL software option is substantially equivalent to the analogous feature in the cleared GE 1.5T and 3.0T Signa HDx MR Systems because it has the same intended use and differences in methodology do not raise new questions of safety and efficacy.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

NOV - 1 2007

GE Medical Systems, LLC
% Mr. Tamas Borsai
Division Manager, Medical Division
TÜV Rheinland of North America
12 Commerce Road
NEWTOWN CT 06470

Re: K072998
Trade/Device Name: IDEAL
Regulation Number: 21 CFR 892.1000
Regulation Name: Magnetic resonance diagnostic device
Regulatory Class: II
Product Code: LNH
Dated: October 17, 2007
Received: October 24, 2007

Dear Mr. Borsai:

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 (PMA), 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.

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 Center for Devices and Radiological Health's (CDRH's) Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter.

21 CFR 876.xxxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 892.xxxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at 240-276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at 240-276-3464. 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

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): K072998

Device Name: IDEAL

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Prescription Use X **AND/OR** **Over-the-Counter Use** _____
(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)

(Division Sign-Off)
Division of Reproductive, Abdominal and
Radiological Devices
510(k) Number K072998