

## 5 510(k) Summary

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of Safe Medical Device Act 1990 and 21 CFR § 807.92.

### I. General Information

**Establishment** Siemens Medical Solutions, Inc.  
51 Valley Stream Parkway  
Malvern, PA 19355

**Registration Number** 2240869

**Manufacturer** Siemens Mindit Magnetic Resonance Ltd.  
Siemens MRI Center,  
Gaoxin C. Ave. 2nd  
Hi-Tech Industrial Park,  
ShenZhen 518057, PR. China

**Registration Number** 3004754211

**Contact Person** Ms. Judy Campbell  
Technical Specialist, Regulatory Submissions  
51 Valley Stream Parkway  
Malvern, PA 19355  
Phone: (610)448-4918  
Fax: (610) 448-1787

**Device Name** Trade Name: MAGNETOM C! System  
Classification Name: Magnetic Resonance  
Diagnostic Device  
CFR Code: 21 CFR § 892.1000  
Classification: Class II

### Performance Standards

None established under Section 514 the Food, Drug and Cosmetic Act.

## II. Safety and Effectiveness Information Supporting Substantial Equivalence.

### Intended Use

The MAGNETOM C! is indicated for use as magnetic resonance diagnostic devices (MRDD) that produce transverse, sagittal, coronal and oblique cross sectional images, and that display the internal structure and/or function of the head, body, or extremities. Depending on the region of interest, contrast agents may be used. These images when interpreted by a trained physician yield information that may assist in diagnosis.

The MAGNETOM C! may also be used for imaging during interventional procedures when performed with MR compatible devices such as, in room display and MR safe biopsy needles.

Disclaimer: Utility of contrast enhanced breast MRI for the detection of breast masses has not been documented and is thus not indicated.

### Device Description

The MAGNETOM C! system is an open, whole body scanner designed to support improved higher resolution imaging and shorter scan times, which was described in premarket notification K043030 which received FDA clearance on December, 10, 2004. Siemens intends to modify the RF Infra Structure, RF Signal Unit, Filter Plate, Gradient Amplifier, Physiological Measurement Unit, Measurement and Reconstruction System, Magnet Temperature Unit, Patient Table Control, Power Distribution System, External Field Interference, Integrated Cooling System and software update for the existing MAGNETOM C! Magnetic Resonance System.

### Substantial Equivalence

Siemens believes that, within the meaning of the Safe Medical Device Act of 1990, the MAGNETOM C!, which is configured with modified hardware and software, is substantially equivalent to the following cleared medical devices, which offers the same applications and handling:

<i>Predicate Device Name</i>	<i>FDA Clearance Number</i>	<i>FDA Clearance Date</i>
Siemens MAGNETOM 1.5T ESSENZA	K071925	08/14/2007
Siemens MAGETOM 0.35 T C !	K043030	12/10/2004

### **General Safety and Effectiveness Concerns**

Operation of the MAGNETOM C! System is substantially equivalent to the commercially available MAGNETOM C! (K043030) System and 1.5 T ESSENZA System (071925). Below are the parameters specified by the FDA guidance document for MR Diagnostic Devices that will be evaluated based on the modifications:

#### Performance Levels

- Signal to Noise
- Image Uniformity
- Geometric Distortion
- High Contrast Spatial Resolution
- Slice Thickness

#### Safety Levels

None

The MAGNETOM C! will conform to the FDA recognized NEMA Standards for the measurement of performance and safety parameters and the international IEC standard for safety issues with Magnetic Resonance Imaging Devices. This will assure that the performance of this device can be considered safe and effective with respect to the currently available MAGNETOM C!( K043030) and MAGNETOM ESSENZA (K071925).



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OCT 01 2008

Ms. Judith Campbell  
Regulatory Technical Specialist  
Siemens Medical Solutions USA, Inc.  
51 Valley Stream Parkway  
MALVERN PA 19355

Re: K082331

Trade/Device Name: MAGNETOM C!  
Regulation Number: 21 CFR 892.1000  
Regulation Name: Magnetic resonance diagnostic device  
Regulatory Class: II  
Product Code: LNH and MOS  
Dated: August 11, 2008  
Received: August 14, 2008

Dear Ms. Campbell:

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 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). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometrics' (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,



Joyce M. Whang, Ph.D.  
Acting Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

# 4 Indications for Use Statement

510(k) Number (if known) K082331

Device Name: **MAGNETOM C!**

**Indications for Use:**

The MAGNETOM C! is indicated for use as magnetic resonance diagnostic devices (MRDD) that produce transverse, sagittal, coronal and oblique cross sectional images, and that display the internal structure and/or function of the head, body, or extremities. Depending on the region of interest, contrast agents may be used. These images when interpreted by a trained physician yield information that may assist in diagnosis.

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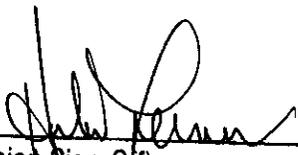
Disclaimer: Utility of contrast enhanced breast MRI for the detection of breast masses has not been documented and is thus not indicated.

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Concurrence of CDRH, Office of Device Evaluation

Prescription Use  OR Over-The-Counter Use

  
\_\_\_\_\_  
(Division Sign-Off)  
Division of Reproductive, Abdominal and  
Radiological Devices  
510(k) Number K082331