

OCT 22 2003

K032477

Traditional 510(k) Premarket Notification
GE Medical Systems - GE LOGIQ Book BT03 Ultrasound System
August 8, 2003

Section 2:
510(k) Summary
Per 21 CFR Part 807.92.



GE Medical Systems

General Electric Company
P.O. Box 414, Milwaukee, WI 53201

Section a):

1. Submitter: GE Medical Systems
PO Box 414
Milwaukee, WI 53201

Contact Person: Allen Schuh,
Manager, Safety and Regulatory Engineering
Telephone: 414-647-4385, Fax: 414-647-4090

Date Prepared: August 8, 2003

2. Device Name: GE LOGIQ Book Diagnostic Ultrasound System
Ultrasonic Pulsed Doppler Imaging System, 21 CFR 892.1550, 90-IYN
Ultrasonic Pulsed Echo Imaging System, 21 CFR 892.1560, 90-IYO
Diagnostic Ultrasonic Transducer, 21 CFR 892.1570, 90-ITX

3. Marketed Device: GE LOGIQ Book BT03 is substantially equivalent to the GE LOGIQ Book, 510(k) Number K014206, a device currently in commercial distribution.

4. Device Description: The GE LOGIQ Book BT03 is a compact and portable diagnostic ultrasound system with integrated keyboard, LCD type display and interchangeable electronic-array transducers. It has an overall size approximately 35 cm wide, 28 cm deep and 8 cm high in transport configuration and provides digital acquisition, processing and display capability. The user interface includes a computer keyboard with an intuitive layout of imaging controls, track-ball, color GUI display and Doppler audio.

5. Indications for Use: The GE LOGIQ Book BT03 is a general purpose ultrasound system. Specific clinical uses include Fetal/OB; Abdominal (GYN & Urology); Pediatric; Small Organ (breast, testes, thyroid); Neonatal and Adult Cephalic; Cardiac (adult & pediatric); Peripheral Vascular; Intra-operative (abdominal, thoracic and PV), Musculo-skeletal Conventional; Transrectal; and Transvaginal.

6. Comparison with Predicate Device: The LOGIQ Book BT03 is of a comparable type and substantially equivalent to the currently marketed GE LOGIQ Book. It has the same technological characteristics of design, construction, and materials; is comparable in key safety and effectiveness features. It is being updated with additional transducers to provide new indications consistent with other GE LOGIQ systems.

Section b):

1. Non-clinical Tests: The device has been evaluated for acoustic output, biocompatibility, and thermal, electrical and mechanical safety, and has been found to conform with applicable medical device safety standards.

2. Clinical Tests: None required.

3. Conclusion: Intended uses and other key features are consistent with traditional clinical practice, FDA guidelines, and established methods of patient examination. The design and development process of the manufacturer conforms with 21 CFR 820 Quality System Regulation and ISO 9001 & ISO 13485 quality system standards. The product is designed to conform with applicable medical device safety standards and compliance is verified by independent test house evaluation with ongoing production surveillance. Diagnostic ultrasound has accumulated a long history of safe and effective performance. Therefore, it is the opinion of GE Medical Systems that the GE LOGIQ Book BT03 system is substantially equivalent with respect to safety and effectiveness to devices currently cleared for market.



OCT 22 2003

Mr. Allen Schuh
Manager, Safety & Regulatory Engineering
GE Medical Systems
Ultrasound and Primary Care Diagnostic, LLC
4855 West Electric Avenue
MILWAUKEE WI 53219

Re: K032477

Trade Name: GE LOGIQ Book BT03 Diagnostic Ultrasound System
Regulation Number: 21 CFR 892.1550
Regulation Name: Ultrasonic pulsed doppler imaging system
Regulation Number: 21 CFR 892.1560
Regulation Name: Ultrasonic pulsed echo imaging system
Regulation Number: 21 CFR 892.1570
Regulation Name: Diagnostic ultrasonic transducer
Regulatory Class: II
Product Code: 90 IYN, IYO, and ITX
Dated: October 6, 2003
Received: October 7, 2003

Dear Mr. Schuh:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we 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). 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.

This determination of substantial equivalence applies to the following transducers intended for use with the GE LOGIQ Book BT03 Diagnostic Ultrasound System, as described in your premarket notification:

Transducer Model Number

3C-RS
8C-RS

E8C-RS
10LB-RS
i12L-RS
8L-RS
3S-RS

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 determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration
Center for Devices and Radiological Health
Document Mail Center (HFZ-401)
9200 Corporate Boulevard
Rockville, Maryland 20850

This letter will allow you to begin marketing your device as described in your 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 market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, “Misbranding by reference to premarket notification” (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address “<http://www.fda.gov/cdrh/dsmamain.html>”.

If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,



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

Enclosure(s)

K032477

Traditional 510(k) Premarket Notification
 GE Medical Systems - GE LOGIQ Book Ultrasound BT03
 March 8, 2002

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book Ultrasound System

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse	Other
Ophthalmic											
Fetal / Obstetrics	P	P	P		P		P	P	P		
Abdominal ^[1]	P	P	P		P		P	P	P		
Pediatric	P	P	P		P		P	P	P		
Small Organ ^[2]	P	P	P		P		P	P	P		
Neonatal Cephalic	P	P	P		P		P	P	P		
Adult Cephalic	N	N	N		N		N	N			
Cardiac ^[3]	P	P	P		P		P	P	P		
Peripheral Vascular	P	P	P		P		P	P	P		
Musculo-skeletal Conventional	P	P	P		P		P	P	P		
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P		P	P	P		
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal	P	P	P		P		P	P			
Transvaginal	P	P	P		P		P	P			
Transurethral											
Intraoperative	N	N	N		N		N	N	N		
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

- Notes: [1] Abdominal includes renal, GYN/Pelvic
 [2] Small organ includes breast, testes, thyroid.
 [3] Cardiac is Adult and Pediatric.
 [4] Other use includes Urology/Prostate
 [*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Prescription User (Per 21 CFR 801.109)

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with 3C-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse	Other
Ophthalmic											
Fetal / Obstetrics	P	P	P		P		P	P	P		
Abdominal ^[1]	P	P	P		P		P	P	P		
Pediatric	P	P	P		P		P	P	P		
Small Organ (specify)											
Neonatal Cephalic											
Adult Cephalic											
Cardiac ^[3]	P	P	P		P		P	P	P		
Peripheral Vascular											
Musculo-skeletal Conventional											
Musculo-skeletal Superficial											
Other ^[4]	P	P	P		P		P	P	P		
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative (specify)											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes GYN;

[3] Cardiac is Adult and Pediatric.

[4] Other use includes Urology;

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Nancy C Brody

(Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Prescription User (Per 21 CFR 801.109)

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with 8C-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse	Other
Ophthalmic											
Fetal / Obstetrics											
Abdominal ^[1]	E	E	E		E		E	E	E		
Pediatric	E	E	E		E		E	E	E		
Small Organ (specify)	E	E	E		E		E	E	E		
Neonatal Cephalic	E	E	E		E		E	E	E		
Adult Cephalic											
Cardiac ^[3]	E	E	E		E		E	E	E		
Peripheral Vascular	E	E	E		E		E	E	E		
Musculo-skeletal Conventional	E	E	E		E		E	E	E		
Musculo-skeletal Superficial											
Other ^[4]											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative (specify)											
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

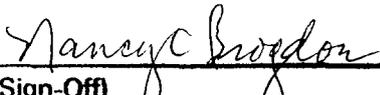
Notes: [1] Abdominal includes GYN/Pelvic, Renal and Aorta-iliac artery;

[3] Cardiac is Adult and Pediatric.

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with E8C-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/ Region of Interest</i>	Mode of Operation											
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse		
Ophthalmic												
Fetal / Obstetrics	P	P	P		P		P	P				
Abdominal ^[1]	P	P	P		P		P	P				
Pediatric												
Small Organ (specify)												
Neonatal Cephalic												
Adult Cephalic												
Cardiac												
Peripheral Vascular												
Musculo-skeletal Conventional												
Musculo-skeletal Superficial												
Other ^[4]	P	P	P		P		P	P				
<i>Exam Type, Means of Access</i>												
Transesophageal												
Transrectal	P	P	P		P		P	P				
Transvaginal	P	P	P		P		P	P				
Transurethral												
Intraoperative (specify)												
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P = previously cleared by FDA; E = added under Appendix E

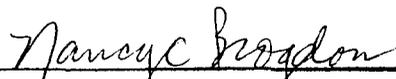
Notes: [1] Abdominal includes GYN/Pelvic;

[4] Other use includes Urology/Prostate;

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with 10LB-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation									
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse
Ophthalmic										
Fetal / Obstetrics										
Abdominal	P	P	P		P		P	P		
Pediatric	P	P	P		P		P	P		
Small Organ ^[2]	P	P	P		P		P	P		
Neonatal Cephalic										
Adult Cephalic										
Cardiac										
Peripheral Vascular	P	P	P		P		P	P		
Musculo-skeletal Conventional	P	P	P		P		P	P		
Musculo-skeletal Superficial										
Other (specify)										
<i>Exam Type, Means of Access</i>										
Transesophageal										
Transrectal										
Transvaginal										
Transurethral										
Intraoperative										
Intraoperative Neurological										
Intravascular										
Laparoscopic										

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [2] Small organ includes breast, testes, thyroid.

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Prescription User (Per 21 CFR 801.109)

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with i12L-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

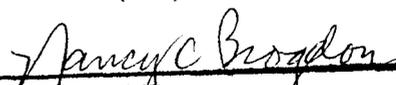
Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation											
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse		
Ophthalmic												
Fetal / Obstetrics												
Abdominal ^[1]	N	N	N		N		N	N	N			
Pediatric	N	N	N		N		N	N	N			
Small Organ ^[2]	N	N	N		N		N	N	N			
Neonatal Cephalic												
Adult Cephalic												
Cardiac ^[3]	N	N	N		N		N	N	N			
Peripheral Vascular	N	N	N		N		N	N	N			
Musculo-skeletal Conventional	N	N	N		N		N	N	N			
Musculo-skeletal Superficial												
Other (specify)												
<i>Exam Type, Means of Access</i>												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative ^[5]	N	N	N		N		N	N	N			
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P = previously cleared by FDA; E = added under Appendix E

- Notes: [1] Abdominal is via Intraoperative;
 [2] Small organ includes breast, testes, thyroid.
 [3] Cardiac is Adult and Pediatric via Intraoperative;
 [5] Intraoperative includes abdominal, thoracic, and vascular.
 [*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


(Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with 8L-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application <i>Anatomy/Region of Interest</i>	Mode of Operation										
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse	
Ophthalmic											
Fetal / Obstetrics											
Abdominal ^[1]	N	N	N		N		N	N			
Pediatric	N	N	N		N		N	N			
Small Organ ^[2]	N	N	N		N		N	N			
Neonatal Cephalic											
Adult Cephalic											
Cardiac ^[3]	N	N	N		N		N	N			
Peripheral Vascular	N	N	N		N		N	N			
Musculo-skeletal Conventional	N	N	N		N		N	N			
Musculo-skeletal Superficial											
Other (specify)											
<i>Exam Type, Means of Access</i>											
Transesophageal											
Transrectal											
Transvaginal											
Transurethral											
Intraoperative ^[5]	N	N	N		N		N	N			
Intraoperative Neurological											
Intravascular											
Laparoscopic											

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal is via surface or Intra-operative;

[2] Small organ includes breast, testes, thyroid.

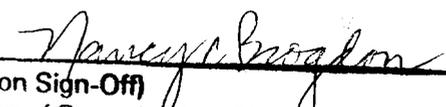
[3] Cardiac is Adult and Pediatric via Intra-operative;

[5] Intra-operative includes abdominal, thoracic, and vascular.

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Urological Devices
 ODE File Number K032477

Diagnostic Ultrasound Indications for Use Form
GE LOGIQ Book with 3S-RS Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application Anatomy/Region of Interest	Mode of Operation											
	B	M	PW Doppler	CW Doppler	Color Doppler	Color M Doppler	Power Doppler	Combined Modes	Harmonic Imaging	Coded Pulse		
Ophthalmic												
Fetal / Obstetrics												
Abdominal ^[1]	N	N	N		N		N	N	N			
Pediatric												
Small Organ ^[2]												
Neonatal Cephalic												
Adult Cephalic	N	N	N		N		N	N	N			
Cardiac ^[3]	N	N	N		N		N	N	N			
Peripheral Vascular												
Musculo-skeletal Conventional												
Musculo-skeletal Superficial												
Other ^[4] (specify)	N	N	N		N		N	N	N			
Exam Type, Means of Access												
Transesophageal												
Transrectal												
Transvaginal												
Transurethral												
Intraoperative												
Intraoperative Neurological												
Intravascular												
Laparoscopic												

N = new indication; P = previously cleared by FDA; E = added under Appendix E

Notes: [1] Abdominal includes GYN;

[3] Cardiac is Adult and Pediatric;

[4] Other use includes Urology;

[*] Combined modes are B/M, B/PWD, B/Color/PWD, B/Power/PWD.

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Concurrence of CDRH, Office of Device Evaluation (ODE)


 (Division Sign-Off)
 Division of Reproductive, Abdominal,
 and Radiological Devices
 510(k) Number K032477

Prescription User (Per 21 CFR 801.109)