

FEB 20 2004  
**MAQUET**

K040221

Document Type  
**Special 510(k)**

Section-Page  
17(38)

Object/Subject <b>Servo-i Ventilator System -510(k) Summary</b>	Doc-ID EVU-111185	Issue no. - 02
--	----------------------	-------------------

**510 (k) Summary  
as required by section 807.92(c)**

**Subscribers Name & Address**

Maquet Critical Care AB  
Röntgenvägen 2  
SE-171 95 Solna, Sweden  
Tel: (011) 46 8 730 73 00  
Fax: (011) 46 8 730 78 38

Contact Person for this submission:

Official Correspondent: Anders Palm  
tele. direct; (011) 46 8 730 74 88  
anders.palm@maquet.com

USA Contact :

Jamie Yieh  
Manager Regulatory Submissions, Maquet Inc.  
Cellphone; 908-227-8807  
jyieh@maquet-inc.com

**Trade Names**

**Servo-i Ventilator System** article no.; 64 87 800 E407E

**Device Classification**

<i>Common Name</i>	<i>Classification Number</i>	<i>Class</i>	<i>Regulation Number</i>
Ventilator, Continuous (Respirator)	73 CBK	II	868.5895

**Predicate Device Identification**

<i>Legally marketed devices to which equivalence is being claimed</i>	<i>510(k) #</i>
Servo Ventilator 300 A,	K970839
Servo-i Ventilatory System	K022132
Evita 4,	K980642

**Device Description (for detailed description see Section F)**

The ventilator is a ventilator with several selectable modes to individually monitor and treat patients whom needs respiratory assistance. The ventilator is the same as described in the notification K010925 and K022132 (addition of BiVent mode and CO2 module).

**Summary of technological characteristics of modified Device and Predicate Device:**

Low minute volume alarm

The Servo-i low minute volume alarm for infants has been changed from 0,10 l/min to 0,06 l/min, the same as that of the Servo-i's predicate, the SV300 ventilator.

**Intended Use of the Device:**

The intended use(s) and indications of the Servo-i application, as described in its labelling, are the same as the intended uses and indications for the *unmodified* Servo-i.

The intended use is the same including;

- the proposed change of the low minute volume alarm from 0,10 to 0,06 l/min

**Intended Use of the Device:**

The Servo-i Ventilator System is intended for treatment and monitoring of patients in the range of neonates, infants and adults with respiratory failure or respiratory insufficiency. Servo-i is a ventilator system to be used only by health care providers in hospitals or health care facilities and for in-hospital transport.

**Note:** The Servo-i Ventilator System is not intended to be used with any anesthetic agents.

**Intended operator:**

Servo-i is a ventilator system with advanced functionality. It may be used only by professional health care providers who have sufficient experience in ventilator treatment.

**Intended Patient Population:**

Servo-i Infant for patient weight 0.5-30 kg

**Intended Use Environment:**

The Servo-i Ventilator System is designed to be used at the bedside and for in-hospital transport.

The Servo-i Ventilator System is not intended to be used with any anesthetic agents.

The Servo-i Ventilator System is not compatible for use in a MRI magnetic field



FEB 2 0 2004

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Maquet Critical Care AB  
c/o Mr. Jamie Yieh  
Maquet, Incorporated  
186 Wood Avenue South  
Iselin, New Jersey 08830

Re: K040221  
Trade/Device Name: Servo-i Ventilator System  
Regulation Number: 21 CFR 868.5895  
Regulation Name: Continuous Ventilator  
Regulatory Class: II  
Product Code: CBK  
Dated: January 26, 2004  
Received: February 2, 2004

Dear Mr. Yieh:

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.

Page 2 – Mr. Jamie Yieh

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 (301) 594-4646. 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 (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>.

Sincerely yours,



Chiu Lin, Ph.D.

Director  
Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K040221

Device Name: Servo-i Ventilator System

**Indications For Use:**

*The Servo<sup>i</sup> Ventilator System is intended for treatment and monitoring of patients in the range of neonates, infants and adults with respiratory failure or respiratory insufficiency. Servo<sup>i</sup> is a ventilator system to be used only by healthcare providers in hospitals or healthcare facilities and for in-hospital transport.*

Prescription Use    
 (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_   
 (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)

Page 1 of 1

  
(Division Sign-Off)  
Division of Anesthesiology, General Hospital,  
Infection Control, Dental Devices

510(k) Number: K040221