

<b>2.1 510(k) Summary of Safety and Effectiveness</b>
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Enginered Medical Systems, Inc.  
2055 Executive Dr.  
Indianapolis, IN 46241

K023683

**Non-Confidential Summary of Safety and Effectiveness**

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October 31, 2002

Engineered Medical Systems 2055 Executive Dr. Indianapolis, IN 46241	Tel (317) 246-5500 Fax (317) 246-5501
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<b>Official Contact:</b>	Bonnie A. Holly – Quality Manager
<b>Proprietary or Trade Name:</b>	Multi-strap Full Face Mask
<b>Common/Usual Name:</b>	Full Face CPAP Mask
<b>Classification Name:</b>	Non-continuous ventilator (IPPB) accessory
<b>Predicate Devices:</b>	Caradyne – Whisperflow mask – K982283 Respironics – Spectrum Full Face Mask – K961915 ResMed – Sullivan Mirage Full Face Mask – K982530

**Device Description:**

The EMS Multi-strap Full Face mask covers both the nose and mouth and includes a non-rebreathing / anti-asphyxia valve, which is activated under flow / pressure from a CPAP or bi-level ventilator. It is open to ambient air when the ventilator is not ON allowing the patient to breath ambient air. It has a quick release mask harness system. It is single patient, multi-use.

**Intended Use:**

Indicated Use --	A patient interface accessory for use with CPAP and bi-level systems used in the treatment of adult OSA and / or ventilatory support.
	A minimum pressure of $\geq 3.0$ cm H <sub>2</sub> O at the mask is required.

Environment of Use --	Hospital, Sub-acute Institutions, Home
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**General Technical Characteristics**

<b>Attribute</b>	<b>EMS – Proposed device</b>
Indications for use	A patient interface accessory for use with CPAP and bi-level systems used in the treatment of adult OSA and / or ventilatory support. A minimum pressure of $\geq 3.0$ cm H <sub>2</sub> O at the mask is required.
Single patient, multi-use	Yes
Prescription	Yes
Intended population	Any patient
Intended Environment of Use	Hospital, Sub-acute Institutions, Home
<b>Design</b>	
Mask covers nose and mouth	Yes
Quick release mask harness	Yes
Non-rebreathing / anti-asphyxia valve	Yes
Must be used with exhalation valve in circuit	Yes
Open to ambient when ventilator off	Yes
Valve opens at $\geq 3$ cm H <sub>2</sub> O	Yes
Can be cleaned	Yes
<b>Materials</b>	
Mask cone and Elbow - PC	Yes
Mask cushion - PVC	Yes
Flap valve - Silicone	Yes
<b>Performance Standards</b>	
None under Section 514	Yes

**Differences between Other Legally Marketed Predicate Devices**

The data within the submission demonstrates that the proposed devices when compared to the predicate devices are safe and effective and are substantially equivalent to the predicate devices.



DEC - 1 2003

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Engineered Medical Systems, Inc.  
C/O Mr. Paul Dryden  
Regulatory Consultant  
Promedic, Inc.  
6329 West Waterview Court  
McCordsville, Indiana 46055-9501

Re: K023683

Trade/Device Name: Multi-Strap Full Face Mask  
Regulation Number: 868.5905  
Regulation Name: Non-Continuous Ventilator  
Regulatory Class: II  
Product Code: BZD  
Dated: October 8, 2003  
Received: October 9, 2003

Dear Mr. Dryden:

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.

Page 2 – Mr. Dryden

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 (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

**2.3 Indications for Use**

**510(k) Number:** K023683 (To be assigned)

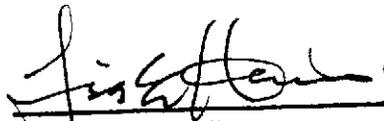
**Device Name:** Multi-strap Full Face Mask

**Intended Use:** A patient interface accessory for use with CPAP and bi-level systems used in the treatment of adult OSA and / or ventilatory support.

A minimum pressure of  $\geq 3.0$  cm H<sub>2</sub>O at the mask is required.

Single patient, multi-use

Concurrence of CDRH, Office of Device Evaluation (ODE)



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

510(k) Number: K023683

Prescription Use   
(Per CFR 801.109)

or

Over-the-counter use