

**510(k) Summary of Safety & Effectiveness**

(as required by 21 CFR 807.92c)

K030028**Date Prepared:**

28 December 28, 2002

**Submitter's Information:**

Soring GmbH Medizintechnik  
 Justus-v.Liebig 10  
 25451 Quickborn  
 Germany

**Trade Name, Common Name, Classification:**

Trade name: Soring GmbH CPC™ devices  
 Common name: Electrosurgical conductive gas coagulation  
 Classification name: 878.4400 - Device, Electrosurgical, Cutting & Coagulation & Accessories

**Predicate Device:**

Name: Söring GmbH, ARCO 3000, ARCO 2000, ARCO 1000, MBC  
 510(k) Number: K993265  
 Regulation Number: 878.4400 - Device, Electrosurgical, Cutting & Coagulation & Accessories  
 Product Code: GEI  
 Decision Date: 10/22/1999

**Device Description:**

During the use of RF surgery devices, power is transmitted via an electrode in the contact zone to tissue. When RF energy reaches a certain upper limit, an arc will occur at the contact zone of the active electrode to the tissue. This leads to a quick warm-up of the intercellular fluid. This vaporization of the intercellular fluid results into a burst of the cells and the tissue loses its cohesion, the electrode then cuts. Lower RF-voltages (below 150veff) lead to a slower heat-up of the tissue, resulting in coagulation with no separation. Short RF-impulses with high voltage lead in a build-up of sparks together with a strong surface coagulation.

Cold plasma technology using Helium gas is a very gentle method for coagulating or dissecting specific types of tissue. In contrast to conventional RF surgery, the penetration depth related to tissue damage and the electrical strain on the patient are significantly reduced (no electrical current flowing through the patient). The significantly lower peak current value (as compared to conventional spray coagulation) results in far less damage to tissue layers immediately beneath the treatment area because constant sine-shaped currents are used.

## **510(k) Summary of Safety & Effectiveness**

(as required by 21 CFR 807.92c)

### **Indications for Use:**

The devices are intended to cut and or coagulate soft biological tissue with gas-enhanced coagulation during general surgical procedures. Typical users of this system are trained medical professionals.

### **Performance Data:**

The Soring GmbH CPC™ devices and predicate devices both use standard data communications controls to detect errors. Both devices comply with IEC 950 – Safety of Information Technology Equipment, CISPR 22, class A – Electromagnetic Compatibility, IEC-801-2, IEC-801-3 – Electromagnetic Compatibility, IEEE 1003.1 – General Electrical Safety for medical devices, IEC 601-1 –Electrical Safety for medical devices using RF-power, IEC 601-2-2 – Special specifications for the safety of RF-surgery units

### **Conclusion:**

Similar to the predicate device, the Soring GmbH CPC™ devices do not control any life sustaining functions or services. The new devices and the predicate devices share the same conformance to performance standards and both function as RF surgery units. Based on the information supplied in this 510(k), we conclude that the subject devices are safe, effective, and substantially equivalent to the predicate devices.



JAN 17 2003

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Soring GmbH Medizintechnik  
c/o Mr. Carl Alletto  
President  
Delta Quality Consulting  
1100 Lakeview Boulevard  
Denton, Texas 76208

Re: K030028

Trade Name: Soring GmbH CPC™ Devices  
Regulation Number: 21 CFR 878.4400  
Regulation Name: Electrosurgical Cutting and Coagulation Device  
and Accessories  
Regulatory Class: II  
Product Code: GEI  
Dated: January 3, 2002  
Received: January 3, 2002

Dear Mr. Alletto:

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 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.

Page 2 – Mr. Carl Alletto

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) 594-4659. 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,

  
for Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

(Indications for Use Form)

510(k) Number:

Device Name: Soring, CPC™ devices

Indications for Use:

The devices are intended to cut and or coagulate soft biological tissue with gas-enhanced coagulation during surgical procedures.

Typical users of this system are trained medical professionals.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use  OR Over -The-Counter Use   
(Per 21 CFR 801.109)

(Optional Format 1-2-96)

Miriam C. Provost  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K030028