

OCT 02 2008



K082510

Sept. 18th, 2008

## Traditional 510(k) Summary

### Image-Arena Applications

Image-Arena VA Platform 1.0  
4D LV-Analysis 2.5  
4D LV-Analysis MR 1.0

FDA CDRH DMC

SEP 23 2008

Received

### Owner's Name and Address

TomTec Imaging Systems GmbH  
Edisonstrasse 6  
D-85716 Unterschleissheim

### Contact Person

Inge Scheidt  
QM & RA Officer  
Phone ++49-89-32175-515  
Fax ++49-89-32175-750

### Common, Classification & Proprietary Names

Common Name: Various Image Analysis System Software  
Classification Name: Picture archiving and communications system  
Proprietary Name(s): Image-Arena Applications

Image-Arena VA Platform 1.0  
4D LV-Analysis 2.5  
4D LV-Analysis MR 1.0



**Predicate Device**

TomTec	K071232	Image-Arena Applications Research-Arena Applications
	K 041682	CAAS MRV

**Device Description**

The hardware requirements are based on an Intel Pentium high performance computer system and Microsoft® Windows XP Professional™ or Microsoft® Windows 2000 Professional™ Operating System standards.

The Image-Arena Applications are a software tool package designed for analysis, documentation and archiving of ultrasound and magnetic resonance studies in multiple dimensions. The Image-Arena Applications software tools are modular structured and consist of different software modules, combining the advantages of the previously FDA 510(k) cleared TomTec software product line Image-Arena Applications and Research-Arena Applications. The different modules can be combined on the demand of the users to fulfil the requirements of a clinical researcher or routine oriented physician.

The Image-Arena Applications offer features to import different digital 2D, 3D and 4D (dynamic 3D) image formats based on defined file format standards (DICOM-, HPSONOS-, GE-, TomTec- file formats) in one system, thus making image analysis independent of the ultrasound-device or other imaging devices used. Offline measurements, documentation in standard report forms, the possibility to implement user-defined report templates and instant access to the stored data through digital archiving make it a flexible tool for image analysis and storage of different imaging modalities data.

**Intended Use**

The Image-Arena Applications software tool package is intended to store, retrieve, analyze and report digital ultrasound and MRI studies. The Image-Arena Platform is based on a SQL – database intended as image management system especially for medical ultrasound and MRI studies.

The Image-Arena Applications software can import certain digital 2D or 3D image file formats for 2D/3D and 4D tomographic reconstructions.

The software is suited to stand-alone workstations as well as networked multi-system installations and is therefore an image management system for research and routine use in both physician practices and hospitals. It is intended as a general purpose digital medical image processing tool for cardiology, radiology, neurology, gastroenterology, urology, surgery, obstetrics and gynecology.



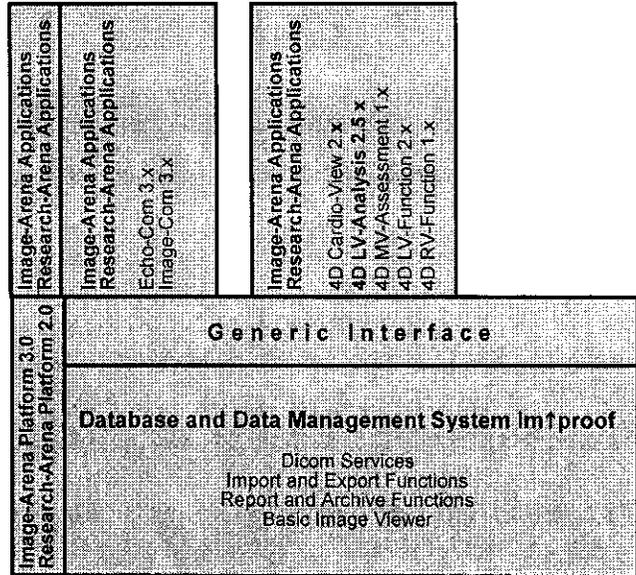
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**Technological Characteristics Comparison**

The Image-Arena Applications software tool package is modular structured and consists of different software modules, combining the advantages of the previously FDA cleared software product.

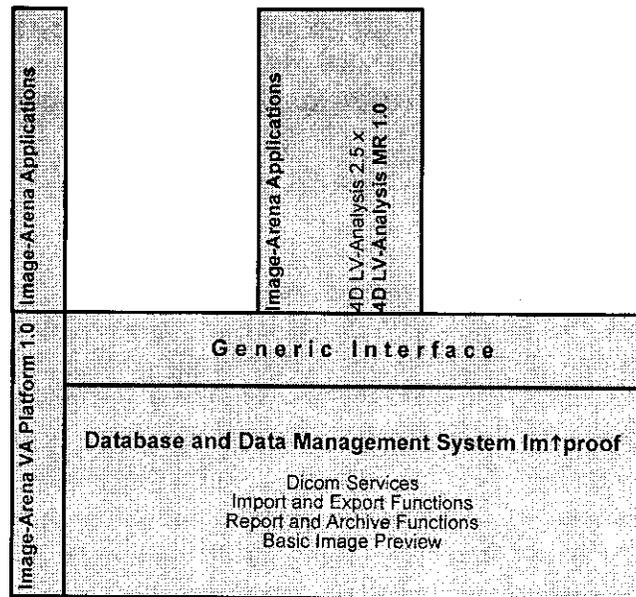
K071232      Image-Arena Applications Research-Arena Applications  
K041682      CAAS MRV, Pie Medical Imaging BV





Predicate Device:

TomTec Image-Arena and Research-Arena  
Applications  
K071232  
K041682 CAAS MRV



New Device:

TomTec Image-Arena  
Applications



**Discussion according non-clinical performance data testing**

Testing was performed according to internal company procedures. Software testing and validation were done at the module and system level according to written test protocols established before testing was conducted. Test results were reviewed by designated technical professionals before software proceeded to release.

**Discussion according clinical performance data testing**

The overall product concept was clinically accepted and the clinical test results support the conclusion that the device is as safe as effective, and performs as well as or better than the predicate device.

**Test Conclusions of non-clinical and clinical performance data**

Test results support the conclusion, that the device is as safe as effective, and performs as well as or better than the predicate device.

Munich, September 18, 2008



Inge Scheidt  
QM & RA Officer





Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OCT 02 2008

Ms. Inge Scheit  
QM & RA Officer  
TomTec Imaging Systems GmbH  
Edisonstrasse 6  
D-85716 Unterschleissheim  
GERMANY

Re: K082510

Trade/Device Name: Image-Arena Applications, Image-Arena VA Platform 1.0, 4D LV-  
Analysis 2.5, and 4D LV-Analysis MR 1.0

Regulation Number: 21 CFR 892.2050

Regulation Name: Picture archiving and communications system

Regulatory Class: II

Product Code: LLZ

Dated: September 19, 2008

Received: September 23, 2008

Dear Ms. Scheit:

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.

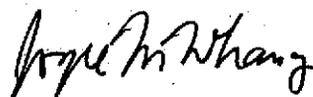
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to 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

**Indications for Use**

510(k) Number (if known): K082510

Device Name:

**Image-Arena Applications**  
**Image-Arena VA Platform 1.0**  
**4D LV-Analysis 2.5**  
**4D LV-Analysis MR 1.0**

Indications for Use:

The Image-Arena VA Platform software is intended to serve as a data management platform for clinical application packages.

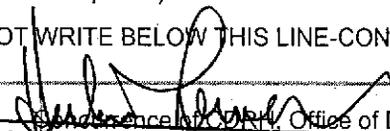
As the Image-Arena Applications software tool package is modular structured, the clinical application packages are indicated as software packages for the ventricular analysis of the heart.

Prescription Use X  
(Part 21, CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

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

  
\_\_\_\_\_  
(Division Sign-Off)

Division of Reproductive, Abdominal and  
Radiological Devices

510(k) Number K082510

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