

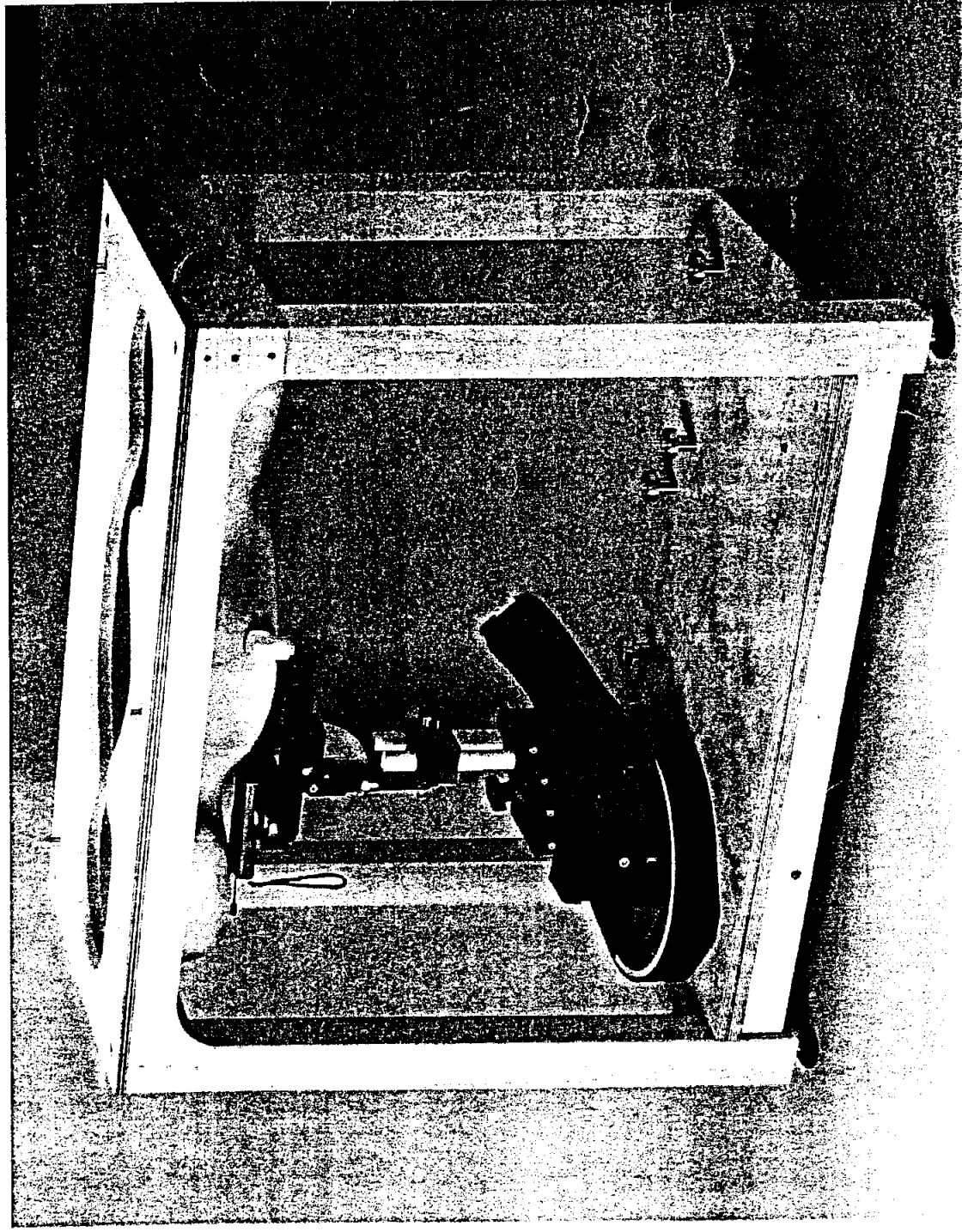
Appendix 6

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GENERIC TWIN PHANTOM
Version 3.

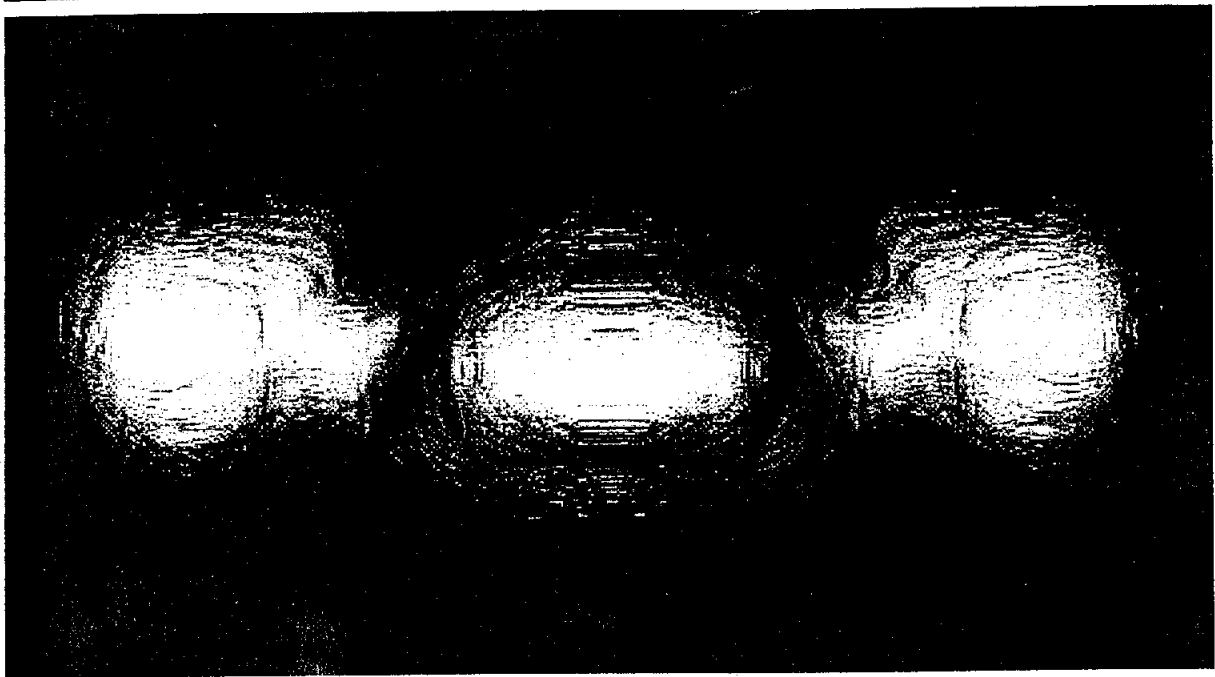
Generic Twin Phantom

Version 3



ADVANCED INFORMATION 7/96

OPTIMIZED PHANTOM WITH IMPROVED MOUNTING DEVICE FOR MTE



Summary

In cooperation with ETH Zurich, Schmid & Partner Engineering AG is currently developing a new phantom, as well as a new device for the mounting and positioning of handheld mobile telecommunications equipment (MTE). This new phantom setup will be optimized for compliance testing in accordance with CENELEC, ANSI/IEEE and NCRP requirements. It will have the following improvements compared to the current setup (Left/Right-Hand Torso V2.1 and Mounting Device for Transmitters V2.0):

Basis	The new phantom will be based on an anatomical study.
Shape	The shape of the new phantom will be designed to provide SAR values which are unlikely to be exceeded in the head of any user. Furthermore, the overestimation will be minimal.
Modeling of the Ear	The phantom will include a simple ear segment which represents the thickness of the pressed human ear.
Construction	The new phantom will also be made of fiberglass. However, the tolerance of the shell thickness will be substantially improved. The fiberglass shell will be integrated into a wooden table which will further improve the stability of the phantom.
Mounting Device	The mounting device for the MTE will allow accurate and repeatable placement of the device with respect to the positions defined in the latest CENELEC draft. The repeatability of the horizontal position shall be better than ± 1 mm. It will be designed to be compatible with current MTE designs and anticipated future designs.
User-Friendliness	The phantom will also be more user-friendly, since left and right hand configurations and the device for mounting and positioning of the MTE will be combined in one setup, i.e., left and right hand measurements will be possible without exchanging phantoms. The minimum amount of simulation liquid to test MTE with operating frequencies above 800 MHz will be reduced.
Compatibility	The phantom will be fully compatible with the hardware and software of DASY2 as well as of DASY3. (DASY3 will be available in late Spring 97.)
Availability	The new phantom and the new device for the mounting and positioning of MTE will be commercially available in October 1996. The shape of the phantom will be available as a CAD data set on the Internet.