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CERTIFICATE

The TESLA-ST enhanced ionization lightning conductor

This certificate confirms that the TESLA-ST lightning conductor system is laboratory tested and complies with the French standard NF C 17 - 102

The TESLA-ST lightning-protection system comprises a pulse-excited, Franklin-type lightning conductor which enhances local atmospheric conditions to provide a larger area of protection than with conventional lightning conductors.

The TESLA-ST carries a sharp pointed rod made from special bronze alloy to attract and capture lightning. This rod incorporates a safety arc-gap for the main lightning current and is attached to a waterproof, spherical casing. The internal gap mechanism, the internal sparking device and circuitry are all mounted inside the sphere. The spherical shape allows the lightning current to pass freely through to the grounding cathode. The casing's base also acts as an external spark-gap between the head and the cathode. A metal horizontal disc is also fitted symmetrically around the casing, making electrical contact with it and the rod. The disc charges inductively during an increase in bad-weather, electric field conditions.

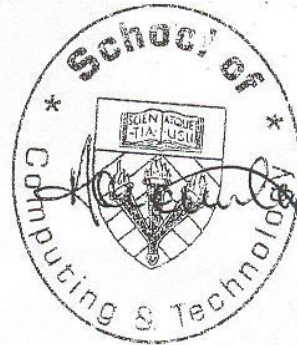
A special high-tension converter is located inside the sphere. High tension is achieved by a plasma arc inside a transverse magnetic field produced by a coil. The circuit is characterized by a series connection of the arc's negative resistance to an inductance and capacitance. Therefore ionizing high-tension is produced at the tip of the rod. The TESLA-ST type is powered inductively from bad weather electric fields and the head of the TESLA-ST is equipped with a safety arrangement to protect its own circuitry during a lightning capture.

Protection Radii

The protection radius is according to the size and dispersion of the ionisation effect in conjunction with the height of the conductor.

Details of Company:

**FOREND
ELECTRICAL MATERIALS &
FOREIGN TRADE Co.
ISTANBUL - TURKEY**

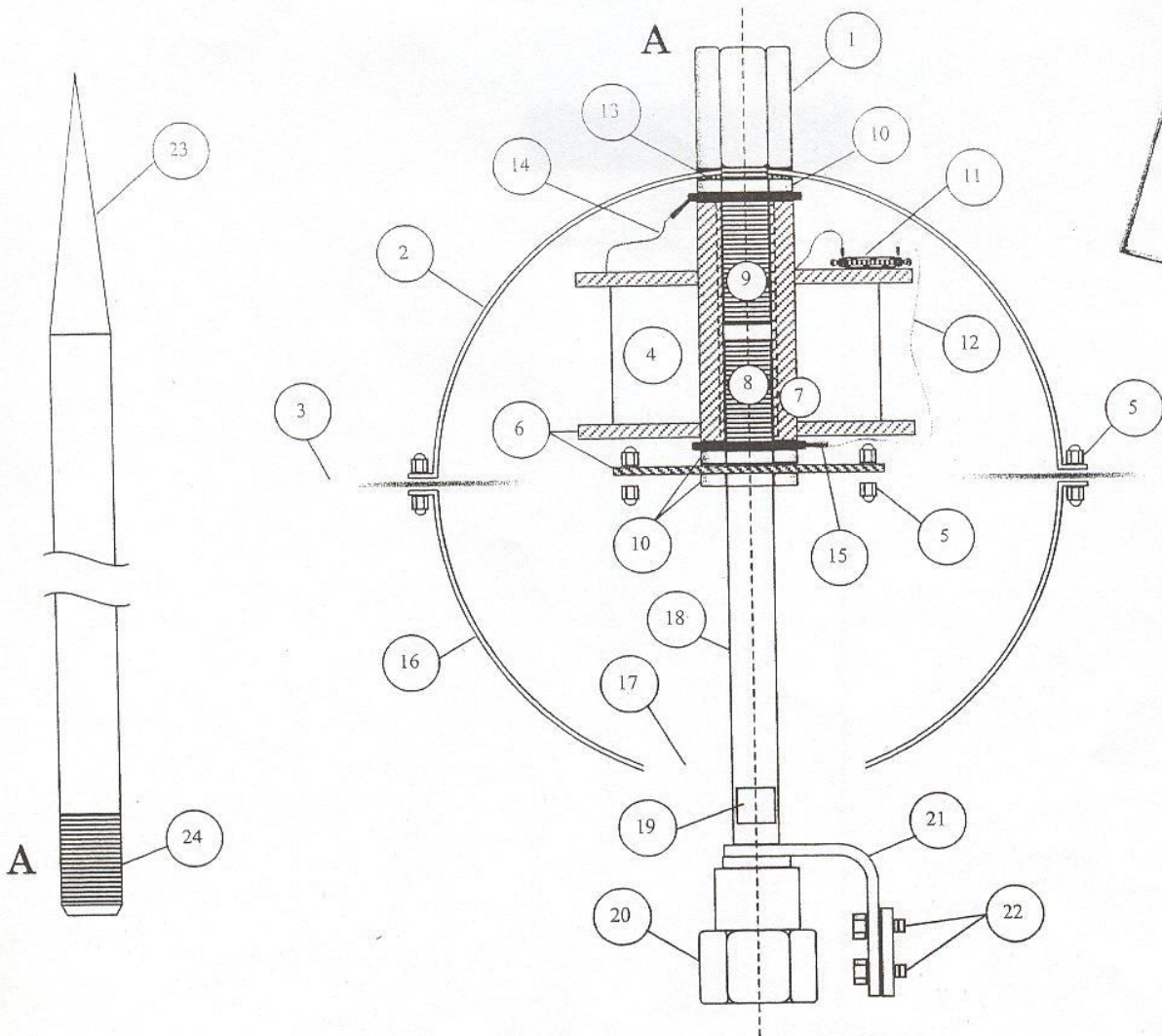


Andrew Chanerley
Senior Lecturer
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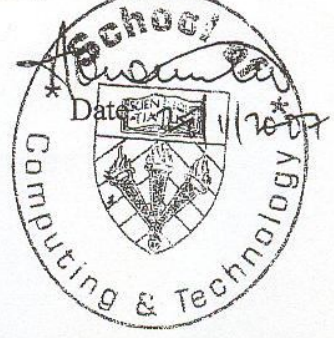
Date: 22/11/2007

Lightning Conductor Head

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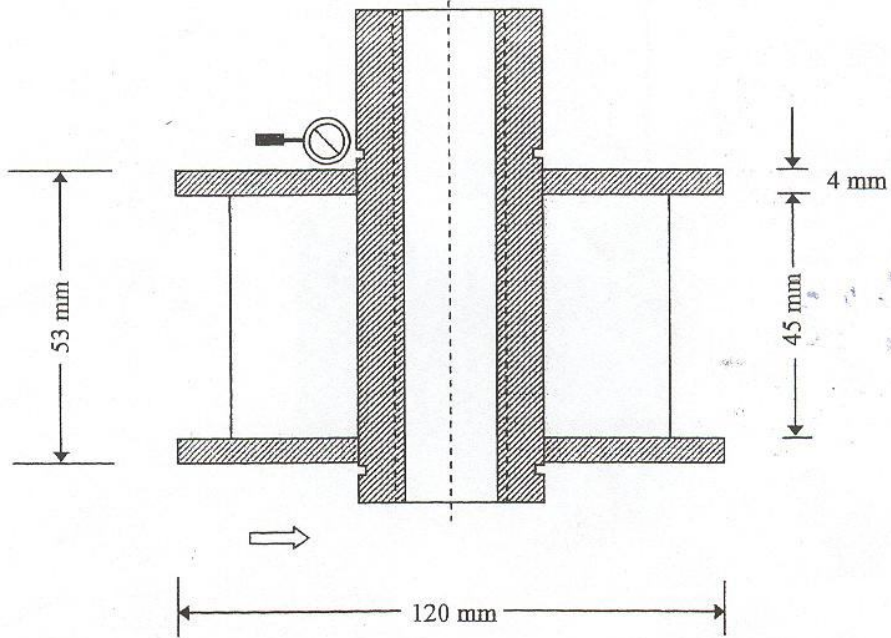
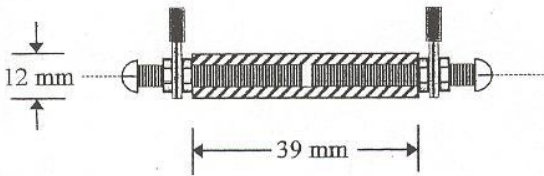
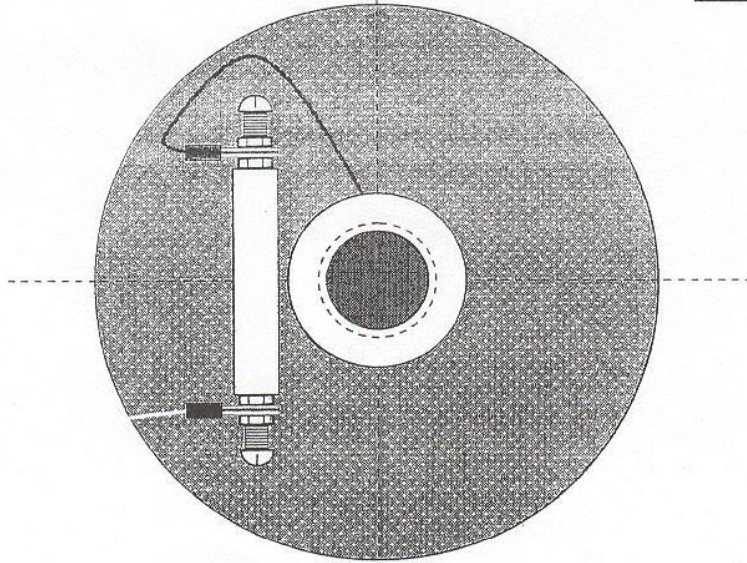
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|---|---|
| 1. Bolted reception point connector | 13. Conductive distance ring |
| 2. Spherical head casing | 14. End of the winding - terminal |
| 3. Head pairing hoop | 15. Bridge terminal of the lower reception point |
| 4. High voltage coil | 16. Lower part of the head casing |
| 5. Head assembly bolts | 17. Gap - external sparkler |
| 6. Insulating disks (bakelite) | 18. Lower part of the reception point towards the cathode |
| 7. Insulating disk (ertalon) | 19. Entrance of the reception point tightening tool |
| 8. Lower part of the reception point | 20. Bolted base for the support of the head |
| 9. Upper part of the reception point | 21. Connector: cathode conductor - head |
| 10. Nuts on the reception point - casing | 22. Screws for the cathode conductor |
| 11. Switching element - Sparkler | 23. Reception point |
| 12. Sparkler - lower reception point bridge | 24. Connection thread: reception point - head |



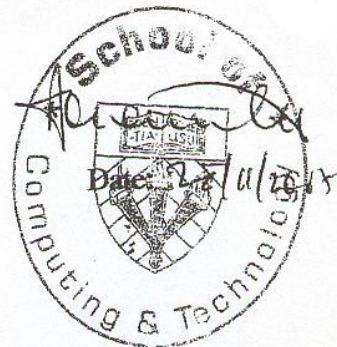
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Coil inside the Lightning Head

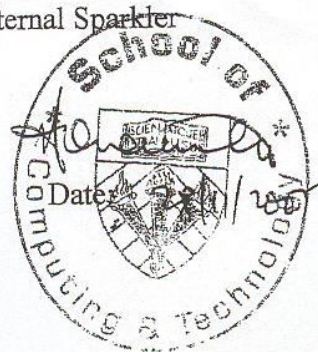
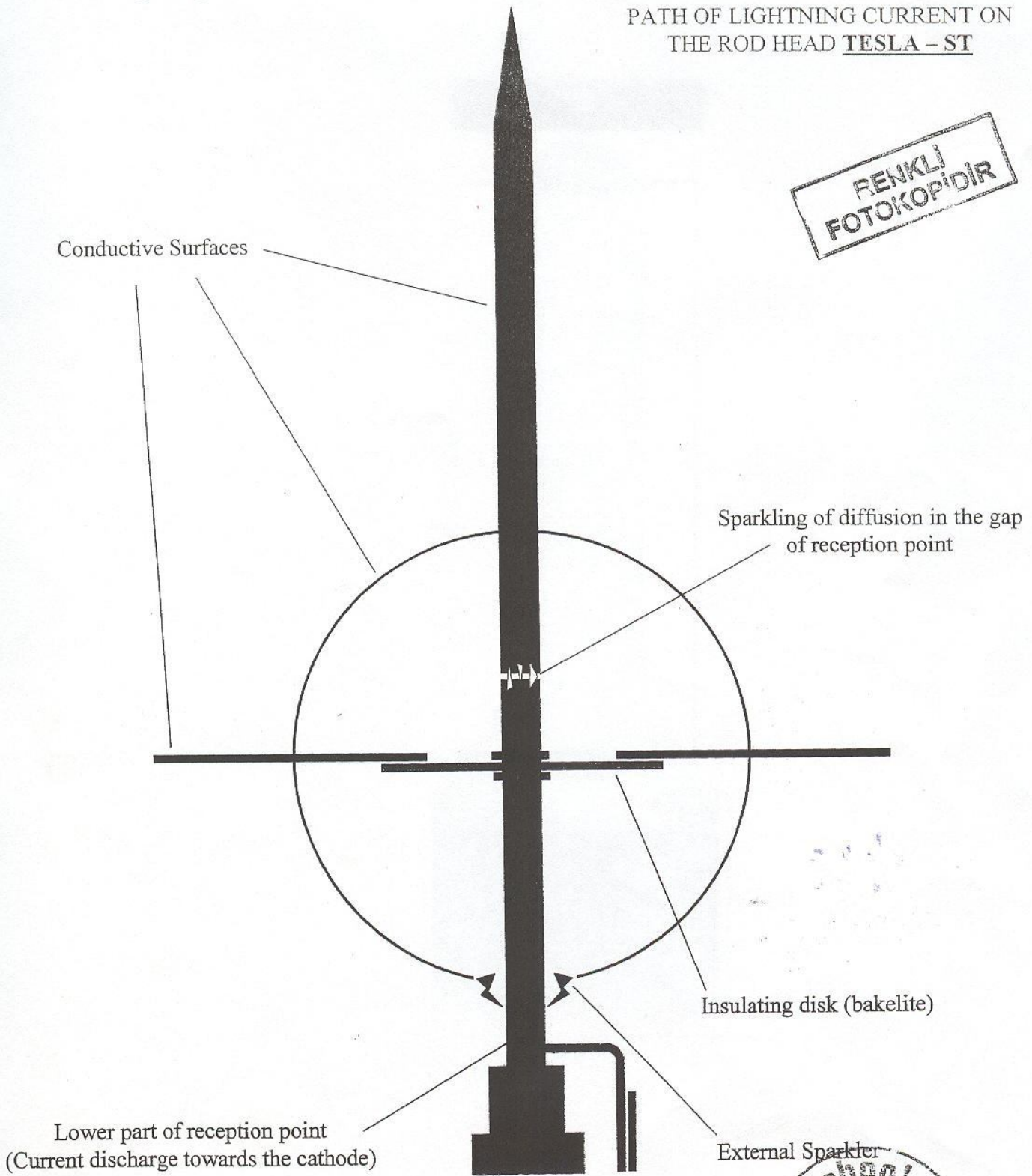


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PATH OF LIGHTNING CURRENT ON THE ROD HEAD TESLA - ST

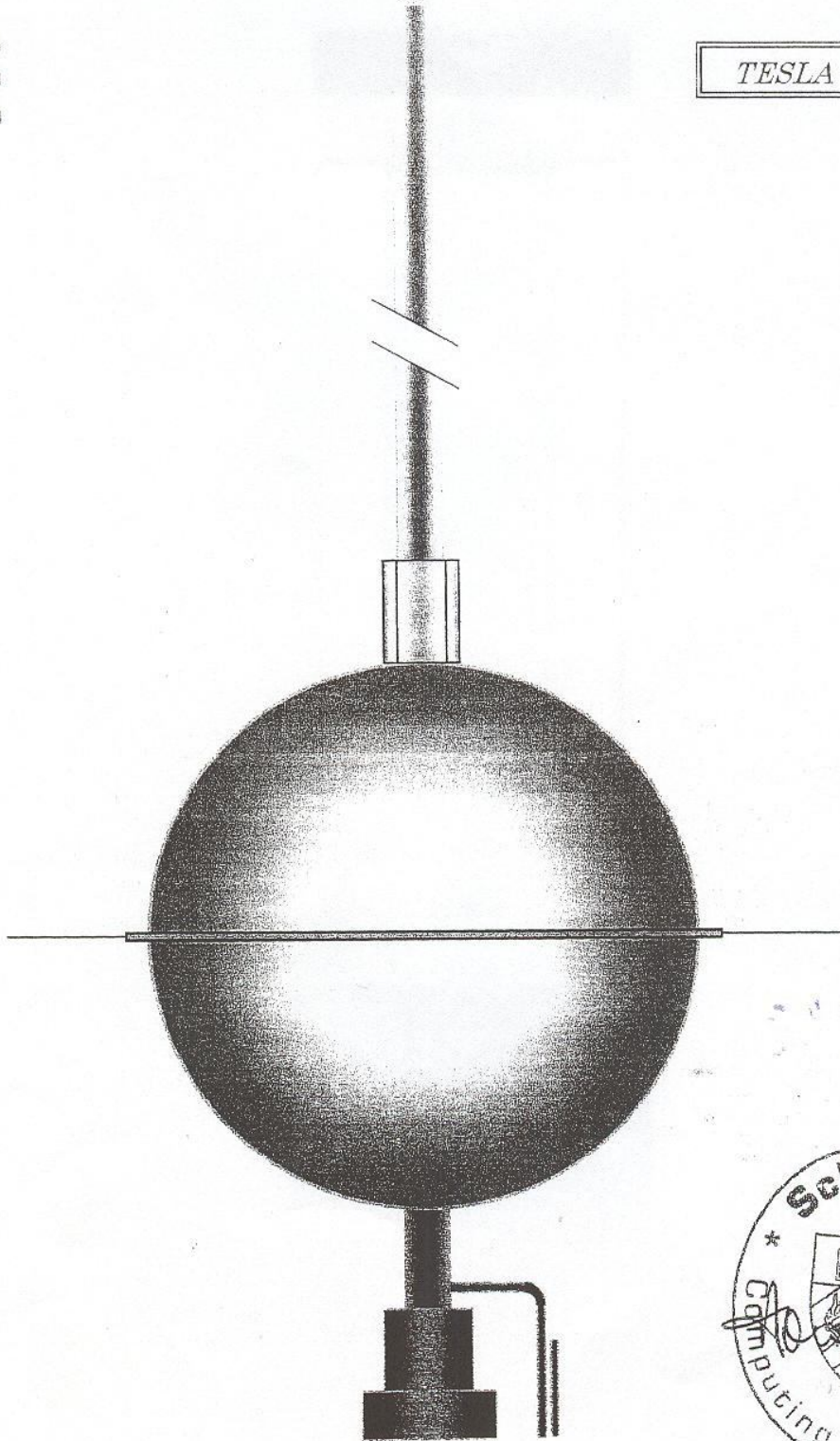
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OUTSIDE APPEARANCE OF THE LIGHTNING ROD'S HEAD TESLA - ST

Date: 28/11/2007