Wireless Charging Device

Team 2

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Purpose of Product
This device can charge toothbrush wirelessly without using a charger and socket.

Feature 1: convenient

Feature 2: environmental-friendly

Feature 3: economical

Market: Asia, Europe, North America
EE-595 lab4

Key Requirements

• Cost
  ➢ Sales Price: $30, Component Cost: $20, Assembly & Test Costs: $5

• Environment
  ➢ Indoor
  ➢ Operating Temp Range: (-10°C to 45°C)
  ➢ Operating Humidity Range: (30% to 90%)

• Power Input(s)
  ➢ Residential AC Power: 100 – 240 VAC @ 50 – 60 Hz @ Max 2 Amps

• Major Functions, Quantities Measured, Displayed
  ➢ Charging efficiency: 40% – 70%
  ➢ Charging speed: Approximately 2~3 hours to be fully charged
EE-595 lab4

Block Diagram

A. Driver Device: Chenshuo Wu
B. Coil : Pengcheng Jiang
C. Rectification: Shilun Liu
D. Load circuit: Dianlin Huang