The intentionally radiated frequencies

The intentionally radiated frequencies are 571.4kHz and 666.7kHz. All the other frequencies are unintentionally radiated.

A. Antenna

•he tablet has two groups of multiple loop coils in X (horizontal) and Y (vertical) directions. Radio frequency energy is radiated from these coils.

Each coil is approximately 26mm wide and as long as the height, for the X-axis, and width, for the Y-axis, of the effective area of the tablet. Each coil consists of 8 turns (loops) of copper conductor.

B. Original oscillation frequency and intentionally radiated frequency

We make the two (571.4kHz and 666.7kHz) intentionally radiated frequencies from the original oscillation frequency of 16.0MHz •Serial•type••or 6.0MHz(USB type) by G/A (Gate Array W4027F).

C. Operation

The tablet looks for a pointing device, such as a stylus, by feeding electrical current of above-mentioned frequencies through the coils in both X axis and Y axis. The current fed through each coil is 17mA(TYP).

The tablet is able to detect the position of a pointing device because of the induction caused between the coil of the pointing device and two coils, one from X-axis and the other from Y-axis, of the sensor board.

D. Comment on pointing device

The pointing device operates with no battery or active oscillator.