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ABSTRACT

Disclosed is an ink-jet type recording device comprising a drive signal generation circuit (84) for generating trapezoidal drive signal in synchronization with a timing signal applied from an external device, switching transistors (85) respectively for outputting a drive signal to piezoelectric vibrators (48) in accordance with a printing signal applied from an external device, and control signal generation means (80) for generating a pulse signal to turn on the switching transistors (85) so that part of the drive signal being output to the piezoelectric vibrators (48) respectively set in non-printing condition in synchronization with a timing signal. Part of the drive signal is applied to the piezoelectric vibrators (48) belonging to the nozzle openings that do not jet out ink droplets in accordance with the pulse signal, so that menisci in the nozzle openings can be vibrated slightly, respectively. As a result of this, ink existing in a pressure generation chamber and ink existing in the neighborhood of the nozzle opening are mixed together and thus solvent is supplemented to the ink existing in the neighborhood of the nozzle opening, thereby preventing formation of an ink film due to evaporation of the solvent. Also, even in the non-printing period the piezoelectric vibrators respectively generate heat to thereby prevent absorption of humidity from the peripheral environment.

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