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**Waida et al.**

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(54) **FIXING DEVICE**

(56) **References Cited**

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(57) **ABSTRACT**

A fixing device includes a rotatable fuser member, a rotatable pressure member, a heater, and a controller. The rotatable fuser member is subjected to heating. The rotatable pressure member is disposed opposite the fuser member. The pressure member presses against the fuser member to form a fixing nip therebetween, through which multiple recording media, each spaced apart from each other by an interval distance in a conveyance direction, are sequentially conveyed at a conveyance speed. The heater is disposed adjacent to the fuser member to heat the fuser member. The controller is operatively connected to the heater to control power supply to the heater through a series of on-off switching control cycles, each including an on-time during which the heater power supply is on, and an off-time during which the heater power supply is off, in synchronization with conveyance of the recording medium.

**23 Claims, 11 Drawing Sheets**

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**G03G 15/20** (2006.01)

(52) **U.S. Cl.**

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(58) **Field of Classification Search**

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See application file for complete search history.

