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(71) Applicant: **Ricoh Company, Ltd.**
Tokyo 143-8555 (JP)

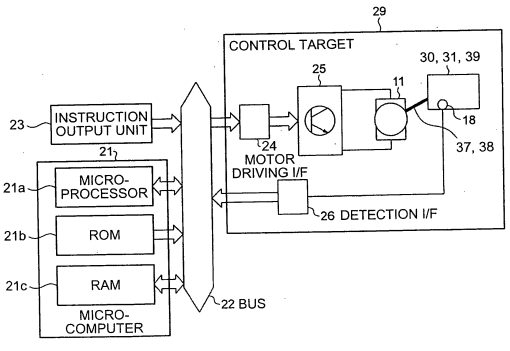
(72) Inventors:
- **Andoh, Toshiyuki,**
  c/o Ricoh Company Limited
  Tokyo 143-8555 (JP)
- **Matsuda, Hiromichi,**
  c/o Ricoh Company Ltd.
  Kanagawa 243-0460 (JP)
- **Hirose, Yuichi,**
  c/o Ricoh Company Limited
  Tokyo 143-8555 (JP)
- **Tao, Satoru,**
  c/o Ricoh Printing Systems Ltd.
  Hitachinaka-City,
  Ibaraki-Pref. 312-8502 (JP)
- **Masuda, Noritaka,**
  c/o Ricoh Printing Systems Ltd.
  Hitachinaka-City,
  Ibaraki-Pref. 312-8502 (JP)
- **Uozaki, Yuji,**
  c/o Ricoh Printing Systems Ltd.
  Hitachinaka-City,
  Ibaraki-Pref. 312-8502 (JP)

(74) Representative: **Leeming, John Gerard**
J A Kemp
14 South Square
Gray's Inn
London WC1R 5JJ (GB)

(54) Belt-conveyance control device, image forming apparatus, belt-conveyance control method, and computer program product

(57) A belt-conveyance control device includes a belt (30) that is supported by a drive roller (31) and a driven roller (32), a pulse motor (11) that drives the drive roller (31), and a first encoder (18) that is attached to the driven roller (32) to detect a displacement of the belt (30). The belt-conveyance control device controls a conveying speed of the belt (30). The belt-conveyance control device further includes a control unit that calculates a difference between the displacement detected by the first encoder (18) and a predetermined target value, calculates a pulse frequency of a driving pulse signal for driving the pulse motor (11) based on a feedback control based on the difference and a feed-forward control based on a reference driving pulse frequency, sets a control range of the feedback control to be equal to or smaller than a frequency of one rotation of the driven roller (32), and controls driving of the pulse motor (11) such that the belt (30) moves at a constant speed.

FIG.2



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EUROPEAN SEARCH REPORT

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EP 08 25 1756

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	31 July 2014	Kys, Walter

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