

**Basic Study on and Prototyping of On-board Automatic Ticket Gate
with Bi-parting Leaf Moving on a Vertical Plane**

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Adoption of on-board ticket examination and collection makes station ticket barriers unnecessary, and cuts off the cost of constructing, maintaining and operating stations. However, on-board examination and collection takes much time when many passengers board and alight from a train. On-board automatic ticket gates would enable short time ticket examination and collection even if the number of passengers boarding and alighting from the train is large. We have manufactured a prototype on-board automatic ticket gate and conducted a test. The test result has shown that introduction of on-board automatic ticket gates can often make the boarding and alighting time shorter than the case when drivers and/or conductors examine and collect tickets.