Simulation of Passing a Turnout by Considering Wheel/Tongue Rail Contact

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In passing a turnout, vehicle may vibrate at the time when a wheel shifts a tongue rail from a stock rail. Fur thermore, at a tongue rail tip, train running safety may be lowered, since wheel/rail contact points are changed rapidly in the short section, due to the possibility event a rail contacts with a wheel at two points, namely wheel tread and flange. The past accident example that occurred at the tongue rail tip has been reported. A program which can take into consideration the contact state of a wheel tread and a tongue rail in detail was developed, and by using the program, the result analyzed about the action of vehicles and the contact state between a wheel/rail of the No. 8 side track turnout is reported.