## Double-bridge



Fig. 1. Initial route, the black edges will Fig. 2. New red edges are added connectbe changed. Four edges, namely ( $\mathrm{A}, \mathrm{B}$ ), $(\mathrm{C}, \mathrm{B}),(\mathrm{E}, \mathrm{F}),(\mathrm{G}, \mathrm{H})$ are randomly chosen.
ing vertices of the first edge and the third edge, and the second edge and the forth edge.


Fig. 3. The black edges are deleted.

