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Possibility to communicate between spatially separated regions, without even a single photon passing between the two parties, is an amazing quantum phenomenon. The possibility of transmitting one value of a bit in such a way, the interaction-free measurement, was known for quarter of a century. The protocols of full communication, including transmitting unknown quantum states were proposed only few years ago, but it was shown that in all these protocols the particle was leaving a weak trace in the transmission channel, the trace larger than the trace left by a single particle passing through the channel. However, a simple modification of these recent protocols eliminates the trace in the transmission channel and makes all these protocols truly counterfactual.