Challenger *A*

Generates
Point: ID_{RP1},ID_{RP2}
Random Number: N_{U1},N_{U2},ID_U,ID_U'
Lets
$PID_{U1}=ID_U N_{U1} ID_{RP1}$
$PID_{U2}=ID_U' N_{U2} ID_{RP2}$

ID_{RP1},ID_{RP2}, N_{U1},N_{U2},PID_{U1},PID_{U2} →

← b

b ← A(ID_{RP1},ID_{RP2}, N_{U1},N_{U2},PID_{U1},PID_{U2})

Verifies b