Alternating Bit Protocol (ABP) - Data types

Contructor		Meaning
init :	-> Sys	Initial state
rec1 :	Sys -> Sys	Sender receives bits
rec2 :	Sys -> Sys	Receiver receives pairs of bits & packets
send1 :	Sys -> Sys	Sender sends pairs of bits & packets
send2 :	Sys -> Sys	Receiver sends bits
drop1 :	Sys -> Sys	Drops one element of channel1
drop2 :	Sys -> Sys	Drops one element of channel2
dup1 :	Sys -> Sys	Duplicates one element of channel1
dup2 :	Sys -> Sys	Duplicates one element of channel2

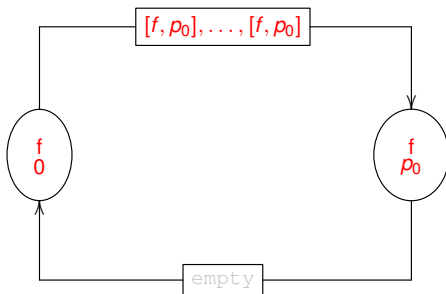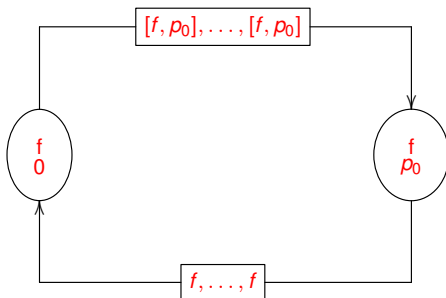| Observer		Meaning
channel1 :	Sys -> Channel1	Sender-to-Receiver channel
channel2 :	Sys -> Channel2	Receiver-to-Sender channel
bit1 :	Sys -> Bit	Sender's bit
bit2 :	Sys -> Bit	Receiver's bit
next :	Sys -> Nat	Number of packet sent by Sender
list :	Sys -> List	Lists of packets received by Receiver

ABP snapshot I
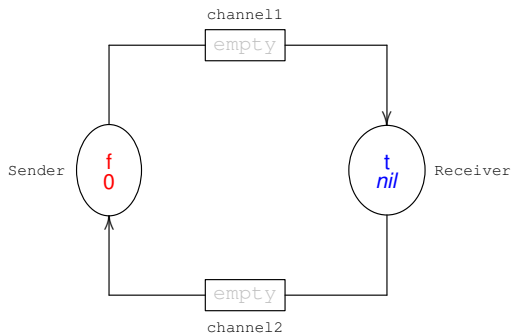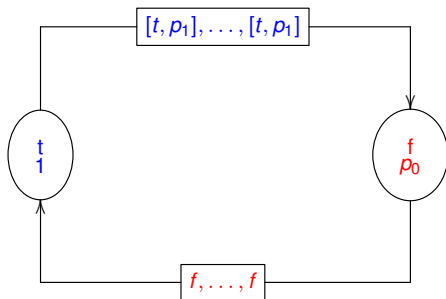
ABP snapshot II
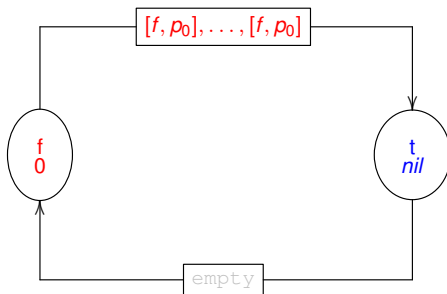
ABP snapshot III

ABP snapshot IV

ABP snapshot V
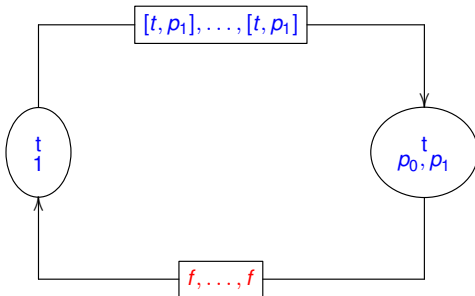
ABP snapshot VI

$[t, p_1], \ldots, [t, p_1], [f, p_0], \ldots, [f, p_0]$

t
1

f
p_0

$f, \ldots, f$
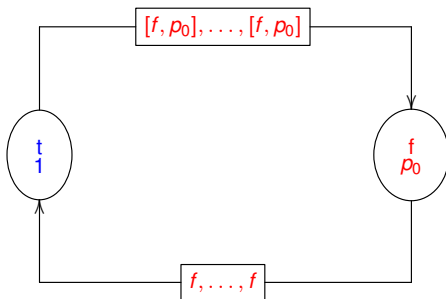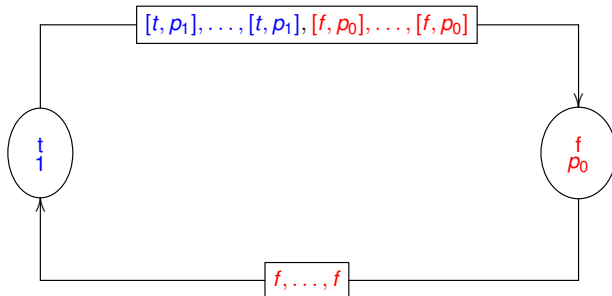
ABP snapshot VII

ABP snapshot VIII

ABP snapshot IX
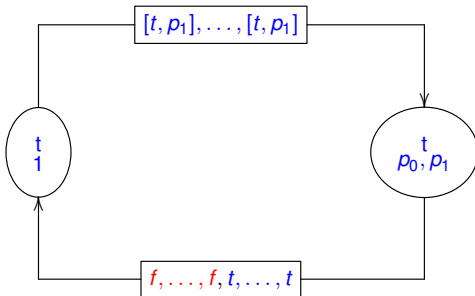
ABP snapshot X

ABP snapshot XI