item, number, producer, consumer
p_0
broker,all,announce,produce-consume
p_1
none, *, -, -
ag_1,broker,offer,num_1
p_2
none, num_1, ag_1, -
,broker,offer,
broker,ag_1,accept,num_1
p_3
bought, num_1, ag_1,-
,broker,offer,
broker,all,declare,forsale
p_4
forsale, num_1, -, -
ag_2,broker,request,nil
p_5
forsale, num_1, -, ag_2
,broker,request,
broker,ag_2,grant,num_1
p_6
sold, num_1, -, ag_2
,broker,request,
broker,all,declare,none
$\neg x, \neg y$
A_{13}
in p_1 to p_6
ag_3,broker,offer,num_x
p_{2x}
none, num_x, ag_3, -
$\neg x, \neg y$
,broker,offer,
broker,ag_3,accept,num_x
p_{3x}
bought, num_x, ag_3,-
$\neg x, y$
,broker,offer,
broker,all,declare,forsale
p_{4x}
forsale, num_x, -, -
$\neg x, \neg y$
ag_x,broker,request,nil
p_{5x}
forsale, num_x, -, ag_x
$\neg x, \neg y$
,broker,request,
broker,ag_x,grant,num_x
p_{6x}
sold, num_x, -, ag_x
$x, \neg y$
,broker,request,
broker,all,declare,none
p_1
p_{6x*}
sold,num_x, -, ag_4
$\neg x, \neg y$
,broker,request,
broker,ag_4,grant,num_x
p_{5x*}
forsale, num_x,-, ag_4
$\neg x, \neg y$
,broker,request,
ag_4,broker,request,nil