

```

1 |----- MODULE AbsJupiterH -----|
2 | EXTENDS AbsJupiter |
3 |-----|
4 | VARIABLE list
5 | varsH  $\triangleq \langle vars, list \rangle$ 
6 |
7 | TypeOKH  $\triangleq TypeOK \wedge (list \subseteq List)$ 
8 |-----|
9 | InitH  $\triangleq Init \wedge list = \{InitState\}$ 
10 |
11 | DoH(c)  $\triangleq Do(c) \wedge list' = list \cup \{state'[c]\}$ 
12 |
13 | RevH(c)  $\triangleq Rev(c) \wedge list' = list \cup \{state'[c]\}$ 
14 |
15 | SRevH  $\triangleq SRev \wedge list' = list \cup \{state'[Server]\}$ 
16 |-----|
17 | NextH  $\triangleq$ 
18 |    $\vee \exists c \in Client : DoH(c) \vee RevH(c)$ 
19 |    $\vee SRevH$ 
20 |
21 | FairnessH  $\triangleq$ 
22 |    $WF_{varsH}(SRevH \vee \exists c \in Client : RevH(c))$ 
23 |
24 | SpecH  $\triangleq InitH \wedge \Box[NextH]_{varsH} \wedge FairnessH$ 
25 |-----|
26 | WLSpec  $\triangleq$  The weak list specification
27 |   Comm!EmptyChannel
28 |      $\Rightarrow \forall l1, l2 \in list :$ 
29 |        $\wedge Injective(l1)$ 
30 |        $\wedge Injective(l2)$ 
31 |        $\wedge Compatible(l1, l2)$ 
32 |
33 | THEOREM SpecH  $\Rightarrow WLSpec$ 
34 |-----|
   \ * Modification History
   \ * Last modified Wed Jan 02 21:02:57 CST 2019 by hengxin
   \ * Created Sat Dec 15 09:00:46 CST 2018 by hengxin

```