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1 |----- MODULE AJupiterH -----|
2 | EXTENDS AJupiter |
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 no need to check Compatible at every state
28 |    $\Rightarrow \forall l1, l2 \in list :$ 
29 |      $\wedge Injective(l1)$  no duplicate elements
30 |      $\wedge Injective(l2)$  true due to our distinctness assumption
31 |      $\wedge Compatible(l1, l2)$ 
32 |
33 | THEOREM SpecH  $\Rightarrow \Box WLSpec$ 
34 |-----|
  
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\ * Modification History
 \ * Last modified *Wed Jan 30 21:37:29 CST 2019* by *hengxin*
 \ * Created *Thu Aug 30 21:26:18 CST 2018* by *hengxin*