─────── MODULE *AJupiterH* ───────

EXTENDS *AJupiter*

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VARIABLE *list*

$varsH \triangleq \langle vars, \, list \rangle$

$TypeOKH \triangleq TypeOK \wedge (list \subseteq List)$

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$InitH \triangleq Init \wedge list = \{InitState\}$

$DoH(c) \triangleq Do(c) \wedge list' = list \cup \{state'[c]\}$

$RevH(c) \triangleq Rev(c) \wedge list' = list \cup \{state'[c]\}$

$SRevH \triangleq SRev \wedge list' = list \cup \{state'[Server]\}$

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$NextH \triangleq$
$\quad \vee \exists \, c \in Client : DoH(c) \vee RevH(c)$
$\quad \vee SRevH$

$FairnessH \triangleq$
$\quad \text{WF}_{varsH}(SRevH \vee \exists \, c \in Client : RevH(c))$

$SpecH \triangleq InitH \wedge \square[NextH]_{varsH} \;\; \wedge FairnessH$

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$WLSpec \triangleq$ The weak list specification
$\quad Comm!EmptyChannel$ no need to check *Compatible* at every state
$\qquad \Rightarrow \forall \, l1, \, l2 \in list :$
$\qquad\qquad \wedge Injective(l1)$ no duplicate elements
$\qquad\qquad \wedge Injective(l2)$ true due to our distinctness assumption
$\qquad\qquad \wedge Compatible(l1, \, l2)$

THEOREM $SpecH \Rightarrow \square WLSpec$

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