



$$\begin{aligned}
& \text{Add}(c) \triangleq \\
& \quad \text{LET } s \triangleq \langle (RandomElement(1 \dots 2)) \rangle \circ C[c].ptIN \quad s \\
& \text{Send}(c) \triangleq \\
& \quad \wedge Print(\langle C \rangle, \text{TRUE}) \\
& \quad \wedge C[c].pts < 3 \\
& \quad \wedge C' = [C \text{ EXCEPT } ![c] = [ \\
& \quad \quad id \mapsto C[c].id, \\
& \quad \quad h \mapsto C[c].h, \\
& \quad \quad pt \mapsto Add(c), \\
& \quad \quad pts \mapsto SumSeq(Add(c)), \\
& \quad \quad tr \mapsto C[c].tr \\
& \quad ] \\
& \text{Commit}(c) \triangleq \\
& \quad \wedge C[c].pts > CT \\
& \quad \wedge C' = [C \text{ EXCEPT } ![c] = [ \\
& \quad \quad id \mapsto C[c].id, \\
& \quad \quad h \mapsto C[c].h, \\
& \quad \quad pt \mapsto \langle \rangle, \\
& \quad \quad pts \mapsto 0, \\
& \quad \quad tr \mapsto C[c].pts \\
& \quad ] \\
& \text{Next} \triangleq \wedge \exists bn \in B : \\
& \quad \vee \wedge \exists c \in \text{DOMAIN } C : \\
& \quad \quad \wedge \vee Send(C[c].id) \\
& \quad \quad \vee Commit(C[c].id) \\
& \quad \vee \wedge C' = [c \in \text{DOMAIN } C \mapsto [ \\
& \quad \quad id \mapsto C[c].id, \\
& \quad \quad h \mapsto bn, \\
& \quad \quad pt \mapsto C[c].pt, \\
& \quad \quad pts \mapsto C[c].pts, \\
& \quad \quad tr \mapsto C[c].tr \\
& \quad ] \\
& \text{Spec} \triangleq Init \wedge \Box [Next]_{\langle C \rangle}
\end{aligned}$$


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