
$P := [Q]_{E_0};$

$L := (\mathbf{if} (|f| \leq |Q \setminus F|) \mathbf{then} \{F\} \mathbf{else} \{Q \setminus F\} \mathbf{fi}) \times V;$

$\{\mathbf{invariant}: [Q]_E \sqsubseteq P \sqsubseteq [Q]_{E_0} \wedge L \subseteq (P \times V)$

$\wedge (\forall Q_0, Q_1, a : Q_0 \in Q \wedge (Q_1, a) \in L : \neg Splittable(Q_0, Q_1, a)) \Rightarrow (P = [Q]_E)\}$

do $L \neq \emptyset \longrightarrow$

let $Q_1, a : (Q_1, a) \in L;$

$P_{old} := P;$

$L := L \setminus \{(Q_1, a)\};$

$\{\mathbf{invariant} : [Q]_E \sqsubseteq P \sqsubseteq P_{old}\}$

for $Q_0 : Q_0 \in P_{old} \wedge Splittable(Q_0, Q_1, a)$ **do**

$Q'_0 := \{p : p \in Q_0 \wedge T(p, a) \in Q_1\};$

$P := P \setminus \{Q_0\} \cup \{Q_0 \setminus Q'_0, b\};$

for $b : b \in V$ **do**

if $(Q_0, b) \in L \rightarrow L := L \setminus \{(Q_0, b)\} \cup \{(Q'_0, b), (Q_0 \setminus Q'_0, b)\};$

$\llbracket (Q_0, b) \in L \rightarrow L := L \cup \{(Q'_0, b), (Q_0 \setminus Q'_0, b)\}$

fi

rof

rof

$\{(\forall Q_0, Q_1, a : Q_0 \in P : \neg Splittable(Q_0, Q_1, a))\}$

od $\{P = [Q]_E\}$
