$I1(p) \triangleq$ [Associated variable: $outcome[p]$]

$(outcome[p] \neq \text{BLANK}) \Rightarrow \exists B \in \mathcal{B} : (B.qrm \subseteq B.vot) \wedge (B.dec = outcome[p])$

$I2(p) \triangleq$ [Associated variable: $lastTried[p]$]

$\wedge\ owner(lastTried[p]) = p$

$\wedge\ \forall B \in \mathcal{B} : (owner(B.bal) = p) \Rightarrow$

$\wedge\ B.bal \leq lastTried[p]$

$\wedge\ (status[p] = trying) \Rightarrow (B.bal < lastTried[p])$

$I3(p) \triangleq$ [Associated variables: $prevBal[p], prevDec[p], nextBal[p]$]

$\wedge\ prevBal[p] = MaxVote(\infty, p, \mathcal{B}).bal$

$\wedge\ prevDec[p] = MaxVote(\infty, p, \mathcal{B}).dec$

$\wedge\ nextBal[p] \geq prevBal[p]$

$I4(p) \triangleq$ [Associated variable: $prevVotes[p]$]

$(status[p] \neq idle) \Rightarrow$

$\forall v \in prevVotes[p] : \wedge\ v = MaxVote(lastTried[p], v.pst, B)$

$\wedge\ nextBal[v.pst] \geq lastTried[p]$

$I5(p) \triangleq$ [Associated variables: $quorum[p], voters[p], decree[p]$]

$(status[p] = polling) \Rightarrow$

$\wedge\ quorum[p] \subseteq \{v.pst : v \in prevVotes[p]\}$

$\wedge\ \exists B \in \mathcal{B} : \wedge\ quorum[p] = B.qrm$

$\wedge\ decree[p] = B.dec$

$\wedge\ voters[p] \subseteq B.vot$

$\wedge\ lastTried[p] = B.bal$

$I6 \triangleq$ [Associated variable: $\mathcal{B}$]

$\wedge\ B1(\mathcal{B}) \wedge B2(\mathcal{B}) \wedge B3(\mathcal{B})$

$\wedge\ \forall B \in \mathcal{B} : B.qrm$ is a majority set

$I7 \triangleq$ [Associated variable: $\mathcal{M}$]

$\wedge\ \forall NextBallot(b) \in \mathcal{M} : (b \leq lastTried[owner(b)])$

$\wedge\ \forall LastVote(b, v) \in \mathcal{M} : \wedge\ v = MaxVote(b, v.pst, \mathcal{B})$

$\wedge\ nextBal[v.pst] \geq b$

$\wedge\ \forall BeginBallot(b, d) \in\ : \exists B \in \mathcal{B} : (B.bal = b) \wedge (B.dec = d)$

$\wedge\ \forall Voted(b, p) \in \mathcal{M} : \exists B \in \mathcal{B} : (B.bal = b) \wedge (p \in B.vot)$

$\wedge\ \forall Success(d) \in \mathcal{M} : \exists p : outcome[p] = d \neq \text{BLANK}$