

<div> <div>MODULE <i>crackers2a</i></div> <div> CONSTANTS <i>Things, People</i> VARIABLES <i>desires, holds</i> $Init \triangleq \wedge desires = [p \in People \mapsto \{\}]$ $\wedge holds = [p \in People \mapsto \{\}]$ $Desire(p) \triangleq \wedge desires[p] = \{\}$ $\wedge \exists t \in Things :$ $\wedge desires' = [desires \text{ EXCEPT } ![p] = \{t\}]$ $\wedge \text{UNCHANGED } holds$ $Acquire(p) \triangleq \exists t \in desires[p] :$ $\wedge t \notin holds[p]$ $\wedge holds' = [holds \text{ EXCEPT } ![p] = holds[p] \cup \{t\}]$ $\wedge \text{UNCHANGED } desires$ $Next \triangleq \exists p \in People :$ $\vee Desire(p)$ $\vee Acquire(p)$ </div> </div>
<div> $Spec \triangleq Init \wedge \Box [Next]_{\langle desires, holds \rangle}$ </div>