

```

(defmac (automaton init-state
                  final-state
                  (state : (action → target) ...) ...))

#:keywords : →
(letrec ([state
          (if (eq? (quote state) (quote final-state))
              ; if final state
              (λ (stream)
                (or (empty? stream) ; stream empty
                    (case (first stream)
                      [(action) (target (rest stream))]
                      ...
                      [else false])))
              ; if not final state
              (λ (stream)
                (and (cons? stream) ; stream not empty
                    (case (first stream)
                      [(action) (target (rest stream))]
                      ...
                      [else false]))))]
          ...))

init-state))

```