

## ecl-machine3-realizes<sup>0,22</sup>

$\forall ds:x:\text{Id fp} \rightarrow \text{Type}, da:k:\text{Kind fp} \rightarrow \text{Type}, x:\text{Id}, T:\text{Type}, ks:\text{Kind List},$   
 $a:(\mathbb{N} \rightarrow (k:\{\text{Kind} \mid (k \in ks)\} \rightarrow \text{State}(ds) \rightarrow \text{Valtype}(da;k) \rightarrow T \rightarrow \mathbb{B})), snd:\text{msg-spec}(ds;da), i:\text{Id}.$   
Normal( $T$ )  
 $\Rightarrow$  Normal( $ds$ )  
 $\Rightarrow$  Normal( $da$ )  
 $\Rightarrow (\forall k \in ks. \text{isrcv}(k) \Rightarrow i = \text{destination}(\text{lnk}(k)) \in \text{Id})$   
 $\Rightarrow \text{msg-spec-loc-decl}(snd;i;da)$   
 $\Rightarrow (\forall k \in ks. k \in \text{dom}(da))$   
 $\Rightarrow \neg x \in \text{dom}(ds)$   
 $\Rightarrow \text{ecl-machine3}(ds;da;x;T;ks;a;snd)$   
 $\Vdash es.\forall l \in \text{remove-repeats}(\text{IdLnkDeq};\text{msg-spec-links}(snd)).$   
 $\text{es-decls}(es;\text{source}(l);ds \oplus x : T;da)$   
 $\Rightarrow$  with decls  $ds \oplus x : T$   
 $\quad da$   
 $\quad$  sends on  $l$  from  $e$   
 $\quad$  include if  $\text{deq-member}(\text{KindDeq};\text{kind}(e);ks) \rightarrow$   
 $\quad \quad \text{tagged-list-messages}((\text{state when } e);$   
 $\quad \quad \quad \text{val}(e);$   
 $\quad \quad \quad \text{ecl-m3}(a;snd;x;l)(\text{kind}(e)))$   
 $\quad$  else nil fi  
 $\quad$  and only these for tags in  $\text{ecl-tags}(l;snd)$