

## is-interface-compose<sup>11,40</sup>

$\forall A, B:\text{Type}, f:(A \rightarrow (B + \text{Top})), ds:(\text{Id} \rightarrow \text{Type}), da:(\text{Id} \rightarrow \text{Knd} \rightarrow \text{Type}), X:\text{Interface}(ds; da; A),$   
 $es:\text{ES}.$   
 $es\text{-decl}(es; ds; da)$   
 $\Rightarrow (\forall e:\mathbb{E}. (e \in_b [[\text{interface-compose}(f; X)]]) = ((e \in_b [[X]]) \wedge_b \text{can-apply}(f; [[X]](e))) \in \mathbb{B})$