

es_realizer_ind^{0,22}

```
case x1 of
Rnone => none
Rplus(left,right)=>rec1,rec2.plus(left;right;rec1;rec2)
Rinit(loc,T,x,v)=> init(loc;T;x;v)
Rframe(loc,T,x,L)=> frame(loc;T;x;L)
Rsframe(lnk,tag,L)=> sframe(lnk;tag;L)
Reffect(loc,ds,knd,T,x,f)=> effect(loc;ds;knd;T;x;f)
Rsends(ds,knd,T,l,dt,g)=> sends(ds;knd;T;l;dt;g)
Rpre(loc,ds,a,T,P)=> pre(loc;ds;a;T;P)
Raframe(loc,k,L)=> aframe(loc;k;L)
Rbframe(loc,k,L)=> bframe(loc;k;L)
Rrframe(loc,x,L)=> rframe(loc;x;L)
≡def Case x1 of
  inl(x) => none
  inr(x)
  => Case x of
    inl(x) => plus(1of(x)
      ;2of(x)
      ;case 1of(x) of
        Rnone => none
        Rplus(left,right)=>rec1,rec2.plus(left;right;rec1;rec2)
        Rinit(loc,T,x,v)=> init(loc;T;x;v)
        Rframe(loc,T,x,L)=> frame(loc;T;x;L)
        Rsframe(lnk,tag,L)=> sframe(lnk;tag;L)
        Reffect(loc,ds,knd,T,x,f)=> effect(loc;ds;knd;T;x;f)
        Rsends(ds,knd,T,l,dt,g)=> sends(ds;knd;T;l;dt;g)
        Rpre(loc,ds,a,T,P)=> pre(loc;ds;a;T;P)
        Raframe(loc,k,L)=> aframe(loc;k;L)
        Rbframe(loc,k,L)=> bframe(loc;k;L)
        Rrframe(loc,x,L)=> rframe(loc;x;L)
      ;case 2of(x) of
        Rnone => none
        Rplus(left,right)=>rec1,rec2.plus(left;right;rec1;rec2)
        Rinit(loc,T,x,v)=> init(loc;T;x;v)
        Rframe(loc,T,x,L)=> frame(loc;T;x;L)
        Rsframe(lnk,tag,L)=> sframe(lnk;tag;L)
        Reffect(loc,ds,knd,T,x,f)=> effect(loc;ds;knd;T;x;f)
        Rsends(ds,knd,T,l,dt,g)=> sends(ds;knd;T;l;dt;g)
        Rpre(loc,ds,a,T,P)=> pre(loc;ds;a;T;P)
        Raframe(loc,k,L)=> aframe(loc;k;L)
        Rbframe(loc,k,L)=> bframe(loc;k;L)
        Rrframe(loc,x,L)=> rframe(loc;x;L)
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inr(x)
⇒ Case x of
  inl(x) ⇒ init(1of(x);1of(2of(x));1of(2of(2of(x)));2of(2of(2of(x))))
  inr(x) ⇒ Case x of
    inl(x) ⇒ frame(1of(x);1of(2of(x));1of(2of(2of(x)));2of(2of(2of(x))))
    inr(x) ⇒ Case x of
      inl(x) ⇒ sframe(1of(x);1of(2of(x));2of(2of(x)))
      inr(x) ⇒ Case x of
        inl(x) ⇒ effect(1of(x)
          ;1of(2of(x))
          ;1of(2of(2of(x)))
          ;1of(2of(2of(2of(x))))
          ;1of(2of(2of(2of(2of(x))))))
          ;2of(2of(2of(2of(2of(x))))))
        inr(x) ⇒ Case x of
          inl(x) ⇒ sends(1of(x)
            ;1of(2of(x))
            ;1of(2of(2of(x)))
            ;1of(2of(2of(2of(x))))
            ;1of(2of(2of(2of(2of(x))))))
            ;2of(2of(2of(2of(2of(x))))))
          inr(x) ⇒ Case x of
            inl(x) ⇒ pre(1of(x)
              ;1of(2of(x))
              ;1of(2of(2of(x)))
              ;1of(2of(2of(2of(x))))
              ;2of(2of(2of(2of(x))))
            inr(x) ⇒ Case x of
              inl(x) ⇒ aframe(1of(x)
                ;1of(2of(x))
                ;2of(2of(
                  x)))
              inr(x) ⇒ Case x of
                inl(x)
                ⇒ bframe(1of(x)
                  ;1of(2of(
                    x))
                  ;2of(2of(
                    x)))
                inr(x)
                ⇒ rframe(1of(x)
                  ;1of(2of(
                    x))
                  ;2of(2of(
                    x)))
            (recursive)

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http://www.cs.cornell.edu/Info/Projects/NuPr1/FDLcontent/p0_286125_/p46_80154_{es_realizer_ind}.html