t36_twoscomp (TMGy-LUQyQNd7a9hy7DmNzr1HipP6GHEmtmj)

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Let $v1\_xtuple\_0 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k40\_twoscomp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15\_twoscomp : \iota$ be given. Let $k3\_twoscomp : \iota$ be given. Let $k5\_circcomb : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_circcomb : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k37\_twoscomp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v1\_circcomb : \iota \Rightarrow o$ be given. Let $v2\_circcomb : \iota \Rightarrow o$ be given. Let $v3\_circcomb : \iota \Rightarrow o$ be given. Let $k34\_twoscomp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(X0 \in u1\_struct\_0\ (k5\_circcomb\ X2\ (k10\_finseq\_1\ X0\ X1)))\wedge((X1 \in u1\_struct\_0\ (k5\_circcomb\ X2\ (k10\_finseq\_1\ X0\ X1)))\wedge(k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ X2 \in u1\_struct\_0\ (k5\_circcomb\ X2\ (k10\_finseq\_1\ X0\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_msualg\_1\ X0))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge(l1\_msualg\_1\ X1))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((X2 \in u1\_struct\_0\ (k2\_circcomb\ X0\ X1))\wedge(X2 \in u1\_struct\_0\ (k2\_circcomb\ X1\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1)\Rightarrow(m1\_subset\_1\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(\neg v2\_struct\_0\ (k37\_twoscomp\ X0\ X1))\wedge((\neg v11\_struct\_0\ (k37\_twoscomp\ X0\ X1))\wedge((v1\_msualg\_1\ (k37\_twoscomp\ X0\ X1))\wedge((v1\_circcomb\ (k37\_twoscomp\ X0\ X1))\wedge((v2\_circcomb\ (k37\_twoscomp\ X0\ X1))\wedge((v3\_circcomb\ (k37\_twoscomp\ X0\ X1))\wedge(l1\_msualg\_1\ (k37\_twoscomp\ X0\ X1))))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(\neg v2\_struct\_0\ (k34\_twoscomp\ X0\ X1))\wedge((\neg v11\_struct\_0\ (k34\_twoscomp\ X0\ X1))\wedge((v1\_msualg\_1\ (k34\_twoscomp\ X0\ X1))\wedge((v1\_circcomb\ (k34\_twoscomp\ X0\ X1))\wedge((v2\_circcomb\ (k34\_twoscomp\ X0\ X1))\wedge((v3\_circcomb\ (k34\_twoscomp\ X0\ X1))\wedge(l1\_msualg\_1\ (k34\_twoscomp\ X0\ X1)))))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k40\_twoscomp\ X0\ X1 = k2\_circcomb\ (k34\_twoscomp\ X0\ X1)\ (k37\_twoscomp\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k37\_twoscomp\ X0\ X1 = k5\_circcomb\ k3\_twoscomp\ (k10\_finseq\_1\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k34\_twoscomp\ X0\ X1 = k5\_circcomb\ k15\_twoscomp\ (k10\_finseq\_1\ X0\ X1) \tag{8}$$

Theorem 1

$$\forall X0.(\neg v1\_xtuple\_0\ X0)\Rightarrow(\forall X1.(\neg v1\_xtuple\_0\ X1)\Rightarrow((X0 \in u1\_struct\_0\ (k40\_twoscomp\ X0\ X1))\wedge((X1 \in u1\_struct\_0\ (k40\_twoscomp\ X0\ X1))\wedge((k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k15\_twoscomp \in u1\_struct\_0\ (k40\_twoscomp\ X0\ X1))\wedge(k4\_tarski\ (k10\_finseq\_1\ X0\ X1)\ k3\_twoscomp \in u1\_struct\_0\ (k40\_twoscomp\ X0\ X1))))))$$