t35_twoscomp (TMYt9tSP1neTP1emDRqwFmUoWwUrL1iPwFz)

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Let $v1\_xtuple\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k3\_msafree2 : \iota \Rightarrow \iota$ be given. Let $k40\_twoscomp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_circcomb : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $u4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v2\_circcomb : \iota \Rightarrow o$ be given. Let $v3\_circcomb : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_msualg\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v1\_circcomb\ X0) \wedge (l1\_msualg\_1\ X0))) \Rightarrow (k3\_msafree2\ X0 = u4\_struct\_0\ X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(\neg v2\_struct\_0\ (k40\_twoscomp\ X0\ X1)) \wedge ((\neg v11\_struct\_0\ (k40\_twoscomp\ X0\ X1)) \wedge ((v1\_msualg\_1\ (k40\_twoscomp\ X0\ X1)) \wedge ((v1\_circcomb\ (k40\_twoscomp\ X0\ X1)) \wedge ((v2\_circcomb\ (k40\_twoscomp\ X0\ X1)) \wedge ((v3\_circcomb\ (k40\_twoscomp\ X0\ X1)) \wedge (l1\_msualg\_1\ (k40\_twoscomp\ X0\ X1)))))))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_msualg\_1\ X0) \Rightarrow ((v2\_circcomb\ X0) \Leftrightarrow (\forall X1.(X1 \in u4\_struct\_0\ X0) \Rightarrow (X1 = k4\_tarski\ (k1\_funct\_1\ (u1\_msualg\_1\ X0)\ X1)\ (k2\_xtuple\_0\ X1))))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Leftrightarrow (\forall X1.\neg(X1 \in X0) \wedge (\forall X2.\forall X3.X1 \neq k4\_tarski\ X2\ X3)) \tag{4}$$

Theorem 1

$$\forall X0.(\neg v1\_xtuple\_0\ X0) \Rightarrow (\forall X1.(\neg v1\_xtuple\_0\ X1) \Rightarrow (v1\_relat\_1\ (k3\_msafree2\ (k40\_twoscomp\ X0\ X1))))$$