

t17\_ff\_siec

(TMR5sGamv8WoZVnFeK4CQk5uvf77KpB2nDn)

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Let  $v1\_net\_1 : \iota \Rightarrow o$  be given. Let  $l1\_petri : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_ff\_siec : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_net\_1 : \iota \Rightarrow \iota$  be given. Let  $k7\_ff\_siec : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_net\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $u4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski X0 X1)\wedge(r1\_tarski X2 X1))\Rightarrow(r1\_tarski (k2\_xboole\_0 X0 X2) X1) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_net\_1 X0)\wedge(l1\_petri X0))\Rightarrow((r1\_tarski (k1\_net\_1 X0) (k2\_zfmisc\_1 (k2\_net\_1 X0) (k2\_net\_1 X0)))\wedge(r1\_tarski (k2\_relat\_1 (k1\_net\_1 X0) (k2\_zfmisc\_1 (k2\_net\_1 X0) (k2\_net\_1 X0)))))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski X0 (k2\_xboole\_0 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1 X1)\Rightarrow(r1\_tarski (k5\_relat\_1 X1 X0) X1) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski X0 X1)\wedge(r1\_tarski X1 X2))\Rightarrow(r1\_tarski X0 X2) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1)\Rightarrow(r1\_tarski (k4\_relat\_1 X0) (k4\_relat\_1 X1)) \quad (6)$$

Assume the following.

$$\forall X0. r1\_tarski (k4\_relat\_1 X0) (k2\_zfmisc\_1 X0 X0) \quad (7)$$

Assume the following.

$$\forall X0. (l1\_petri X0) \Rightarrow (v1\_relat\_1 (k1\_net\_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (v1\_relat\_1 (k2\_relat\_1 X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1\_net\_1 X0) \wedge (l1\_petri X0)) \Rightarrow & (k8\_ff\_siec X0 = k2\_xboole\_0 \\ & (k5\_relat\_1 (k1\_net\_1 X0) (u4\_struct\_0 X0)) (k4\_relat\_1 (u1\_struct\_0 \\ & X0))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1\_net\_1 X0) \wedge (l1\_petri X0)) \Rightarrow & (k7\_ff\_siec X0 = k2\_xboole\_0 \\ & (k5\_relat\_1 (k2\_relat\_1 (k1\_net\_1 X0)) (u4\_struct\_0 X0)) (k4\_relat\_1 \\ & (u1\_struct\_0 X0))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0. (l1\_petri X0) \Rightarrow (k2\_net\_1 X0 = k2\_xboole\_0 (u1\_struct\_0 X0) (u4\_struct\_0 X0)) \quad (12)$$

**Theorem 1**

$$\begin{aligned} \forall X0. ((v1\_net\_1 X0) \wedge (l1\_petri X0)) \Rightarrow & ((r1\_tarski (k8\_ff\_siec \\ X0) (k2\_zfmisc\_1 (k2\_net\_1 X0) (k2\_net\_1 X0))) \wedge & (r1\_tarski (k7\_ff\_siec \\ X0) (k2\_zfmisc\_1 (k2\_net\_1 X0) (k2\_net\_1 X0)))) \end{aligned}$$