

t10\_ff\_siec  
(TMbF4QKcwyewZhC7wbMRwmdiRUAjc16JM5G)

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Let  $v1\_net\_1 : \iota \Rightarrow o$  be given. Let  $l1\_petri : \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_net\_1 : \iota \Rightarrow \iota$  be given. Let  $u4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_relat\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_petri : \iota \Rightarrow \iota$  be given. Let  $u2\_petri : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((v1\_net\_1 X0) \wedge (l1\_petri X0)) \Rightarrow ((r1\_tarski (k10\_xtuple\_0 \\
& (k5\_relat\_1 (k1\_net\_1 X0) (u4\_struct\_0 X0))) (u1\_struct\_0 X0)) \wedge \\
& ((r1\_tarski (k10\_xtuple\_0 (k5\_relat\_1 (k2\_relat\_1 (k1\_net\_1 \\
& X0)) (u4\_struct\_0 X0))) (u1\_struct\_0 X0)) \wedge ((r1\_tarski (k10\_xtuple\_0 \\
& (k5\_relat\_1 (k1\_net\_1 X0) (u1\_struct\_0 X0))) (u4\_struct\_0 X0)) \wedge \\
& ((r1\_tarski (k10\_xtuple\_0 (k5\_relat\_1 (k2\_relat\_1 (k1\_net\_1 \\
& X0)) (u1\_struct\_0 X0))) (u4\_struct\_0 X0)) \wedge ((r1\_tarski (k10\_xtuple\_0 \\
& (k4\_relat\_1 (u4\_struct\_0 X0)) (u4\_struct\_0 X0)) \wedge ((r1\_tarski \\
& (k9\_xtuple\_0 (k4\_relat\_1 (u4\_struct\_0 X0)) (u4\_struct\_0 X0)) \wedge \\
& ((r1\_tarski (k10\_xtuple\_0 (k4\_relat\_1 (u1\_struct\_0 X0)) (u1\_struct\_0 \\
& X0)) \wedge (r1\_tarski (k9\_xtuple\_0 (k4\_relat\_1 (u1\_struct\_0 X0))) \\
& (u1\_struct\_0 X0))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (r1\_tarski (k9\_xtuple\_0 (k5\_relat\_1 X1 X0)) X0) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (r1\_xboole\_0 X0 X1) \Rightarrow (r1\_xboole\_0 X1 X0) \tag{3}$$

Assume the following.

$$\forall X0. k10\_xtuple\_0 (k4\_relat\_1 X0) = X0 \tag{4}$$

Assume the following.

$$\forall X0. k9\_xtuple\_0 (k4\_relat\_1 X0) = X0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((r1\_xboole\_0 X1 X3) \wedge ((r1\_tarski X0 X1) \wedge (r1\_tarski X2 X3))) \Rightarrow (r1\_xboole\_0 X0 X2) \quad (6)$$

Assume the following.

$$\forall X0. (l1\_petri X0) \Rightarrow (v1\_relat\_1 (k1\_net\_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0. (v1\_relat\_1 X0) \Rightarrow (v1\_relat\_1 (k2\_relat\_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0. (l1\_petri X0) \Rightarrow ((v1\_net\_1 X0) \Leftrightarrow ((r1\_xboole\_0 (u1\_struct\_0 X0) (u4\_struct\_0 X0)) \wedge (r1\_tarski (k1\_net\_1 X0) (k2\_xboole\_0 (k2\_zfmisc\_1 (u1\_struct\_0 X0) (u4\_struct\_0 X0)) (k2\_zfmisc\_1 (u4\_struct\_0 X0) (u1\_struct\_0 X0)))))) \quad (9)$$

Assume the following.

$$\forall X0. (l1\_petri X0) \Rightarrow (k1\_net\_1 X0 = k2\_xboole\_0 (u1\_petri X0) (u2\_petri X0)) \quad (10)$$

