

t24_ff_siec

(TMNR5v9MSt2baWXPP9sj7CFh8Lr7AuSXEm7)

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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 $k16_ff_siec : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_net_1 : \iota \Rightarrow \iota$ be given. Let $k15_ff_siec : \iota \Rightarrow \iota$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_petri : \iota \Rightarrow \iota$ be given. Let $u2_petri : \iota \Rightarrow \iota$ 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.

$$\forall X0.(l1_petri X0) \Rightarrow (k2_net_1 X0 = k2_xboole_0 (u1_struct_0 X0) (u4_struct_0 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(l1_petri X0) \Rightarrow (k1_net_1 X0 = k2_xboole_0 (u1_petri X0) (u2_petri X0)) \quad (11)$$

Assume the following.

$$\forall X0.((v1_net_1 X0) \wedge (l1_petri X0)) \Rightarrow (k16_ff_siec X0 = k2_xboole_0 (k5_relat_1 (k1_net_1 X0) (u1_struct_0 X0)) (k4_relat_1 (u4_struct_0 X0))) \quad (12)$$

Assume the following.

$$\forall X0.((v1_net_1 X0) \wedge (l1_petri X0)) \Rightarrow (k15_ff_siec X0 = k2_xboole_0 (k5_relat_1 (k2_relat_1 (k1_net_1 X0) (u1_struct_0 X0)) (k4_relat_1 (u4_struct_0 X0))) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (14)$$

Theorem 1

$$\forall X0.((v1_net_1 X0) \wedge (l1_petri X0)) \Rightarrow ((r1_tarski (k16_ff_siec X0) (k2_zfmisc_1 (k2_net_1 X0) (k2_net_1 X0))) \wedge (r1_tarski (k15_ff_siec X0) (k2_zfmisc_1 (k2_net_1 X0) (k2_net_1 X0))))$$