

t3_scmpds.i (TMTToPP- WfnQ3Yo6aTcEnUbWWvHa46sjUE3pd)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $np_15 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmpds_i : \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_scmpds_i : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (k7_partfun1 X0 (k12_finseq_1 X0 X1) np_1 = X1)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k2_xtuple_0 (k3_xtuple_0 X0 X1 X2) = X2 \quad (2)$$

Assume the following.

$$\neg v1_xboole_0 k2_scm_inst \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_scmpds_i) \Rightarrow (m1_subset_1 (k3_scmpds_i X0) k2_scm_inst) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k1_scmpds_i) \Rightarrow (&(\exists X1.(m1_subset_1 \\ &X1 k2_scm_inst) \wedge (\exists X2.(m2_subset_1 X2 k4_ordinal1 (k7_card_1 \\ &np_15)) \wedge (X0 = k3_xtuple_0 X2 k1_xboole_0 (k12_finseq_1 k2_scm_inst \\ &X1)))) \Rightarrow (\forall X1.(m1_subset_1 X1 k2_scm_inst) \Rightarrow ((X1 = k3_scmpds_i \\ &X0) \Leftrightarrow (\exists X2.(m2_finseq_1 X2 k2_scm_inst) \wedge ((X2 = k2_xtuple_0 \\ &X0) \wedge (X1 = k7_partfun1 k2_scm_inst X2 np_1)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k4_ordinal1 (k7_card_1 np_15)) \Rightarrow (\\ & \quad \forall X1.(m1_subset_1 X1 k1_scmpds_i) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 k2_scm_inst) \Rightarrow ((X1 = k3_xtuple_0 X0 k1_xboole_0 (k12_finseq_1 \\ & \quad k2_scm_inst X2)) \Rightarrow (k3_scmpds_i X1 = X2)))) \end{aligned}$$