t20_fintopo2 (TMYpJPx2SrHksntQuMxJyj41Xn4SX6kDccx)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_fintopo2 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_fintopo2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_fintopo2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_fintopo2\ X0)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (k9\_fintopo2\ X0\ X1 = ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))\ (\lambda X2 : \iota.\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\neg(X3 \in k6\_fintopo2\ X0\ X2) \wedge (r1\_xboole\_0\ X3\ X1)))\ (\lambda X2 : \iota.X2))) \tag{1}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_fintopo2\ X0)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((X1 \in k9\_fintopo2\ X0\ X2) \Leftrightarrow (\forall X3.\ (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\neg(X3 \in k6\_fintopo2\ X0\ X1) \wedge (r1\_xboole\_0\ X3\ X2))))))$$