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--
-- ----- PROOF -----
-- Length of proof is 9.Level of proof is 6 .
-- 1 [ ] c1oc3Uc1oc2≠c1oc2
-- 2 [ ] xUy=yUx
-- 12,11 [ ] x~=x
-- 14,13 [ ] (xUy)~=x~Uy~
-- 16,15 [ ] (xoy)~=y~ox~
-- 17 [ ] (xUy)oz=xozUyoz
-- 18 [ copy,17,flip.1 ] xoyUzoy=(xUz)oy
-- 20 [ ] c3Uc2=c2
-- 23 [ para_from,2.1.1,1.1.1 ] c1oc2Uc1oc3≠c1oc2
-- 25 [ para_into,11.1.1,11.1.1 ] x=x
-- 27,26 [ para_into,20.1.1,2.1.1 ] c2Uc3=c2
-- 110 [ para_from,18.1.1,13.1.1.1,demod,16,14,16,16,flip.1 ] x~oy~Ux~oz~=x~o(y~Uz~)
-- 4398 [ para_into,110.1.1.1.1,11.1.1,demod,12,12 ] xoy~Uxoz~=xo(y~Uz~)
-- 4918 [ para_into,4398.1.1.1.2,11.1.1,demod,12 ] xoyUxoz~=xo(yUz~)
-- 4973,4972 [ para_into,4918.1.1.2.2,11.1.1,demod,12 ] xoyUxoz=xo(yUz)
-- 4975 [ back_demod,23,demod,4973,27 ] c1oc2≠c1oc2

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-- 4976 [ binary,4975.1,25.1 ] F
-- ----- end of proof -----
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--
-- Search stopped by max_proofs option .
--
-- = = = = = end of search = = = = =
--
-- ----- statistics -----
-- clauses given 190
-- clauses generated 28806
-- clauses kept 3883
-- clauses forward subsumed 13006
-- clauses back subsumed 51
-- Kbytes malloced 4566
--
-- ----- times ( seconds ) -----
-- user CPU time 1.69 ( 0 hr,0 min,1 sec )
-- system CPU time 0.0 ( 0 hr,0 min,0 sec )
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-- wall - clock time 1 (0 hr,0 min,1 sec)