Abbreviations
~X_1 = aenc((groupkey_request,sign(groupkey_request,~M_2),~M_3),~M) = aenc((groupkey_request,sign(groupkey_request,attsk_3),cert(attvid_3,pk(attsk_3),cask_3)),pk(cask_3))
~M_8 = aenc(((groupkey_response,attvid_3,gsk(attvid_3,gmsk_4),gpk(gmsk_4)),sign((groupkey_response,attvid_3,gsk(attvid_3,gmsk_4),gpk(gmsk_4)),cask_3)),pk(attsk_3))
~M_9 = aenc(((groupkey_response,vid_7,gsk(vid_7,gmsk_4),gpk(gmsk_4)),sign((groupkey_response,vid_7,gsk(vid_7,gmsk_4),gpk(gmsk_4)),cask_3)),pk(vsk_4))
~X_2 = (a_7,sign(a_7,a_8),pseudocert(pk(a_8),3-proj-4-tuple(1-proj-2-tuple(adec(~M_8,~M_2))))) = (a_7,sign(a_7,a_8),pseudocert(pk(a_8),gsk(attvid_3,gmsk_4)))
~M_10 = aenc(((pseudocert(pk(a_8),gsk(attvid_3,gmsk_4)),revoke_request),sign((pseudocert(pk(a_8),gsk(attvid_3,gmsk_4)),revoke_request),vsk_4),cert(vid_7,pk(vsk_4),cask_3)),pk(cask_3))
~X_3 = aenc(((pseudocert(a_10,3-proj-4-tuple(1-proj-2-tuple(adec(~M_8,~M_2)))),revoke_request),sign((pseudocert(a_10,3-proj-4-tuple(1-proj-2-tuple(adec(~M_8,~M_2)))),revoke_request),~M_5),~M_6),~M) = aenc((pseudocert(a_10,gsk(attvid_3,gmsk_4)),revoke_request),sign((pseudocert(a_10,gsk(attvid_3,gmsk_4)),revoke_request),attsk_4),cert(attvid_4,pk(attsk_4),cask_3)),pk(cask_3))

A trace has been found.