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**LUBRICATING OIL DEWAXING USING MEMBRANE SEPARATION OF
COLD SOLVENT FROM DEWAXED OIL AND RECYCLE OF
COLD SOLVENT TO FILTER FEED**

ABSTRACT

5 A process for solvent dewaxing a waxy oil feed to
obtain petroleum oil lubricating stock comprising the steps
of contacting a warm waxy oil feed by indirect heat
exchange first with cold filtrate, then with refrigerant to
crystallize and precipitate the wax in the oil feed to form
10 an oil/solvent/wax mixture. The oil/solvent/wax mixture is
diluted with cold solvent to adjust the viscosity of the
mixture and the mixture is filtered and removes the wax
from the cold oil/solvent/wax mixture. A cold wax cake is
recovered and a cold oil/solvent filtrate stream is
15 recovered. The cold oil/solvent filtrate stream is fed, at
the filtration temperature, to a selective permeable
membrane. The membrane selectively separates the cold
filtrate into a cold solvent permeate stream and a cold
filtrate stream which contains the dewaxed oil and the
20 remaining solvent. The cold solvent permeate stream at the
filtration temperature is recycled to the filter feed
stream. The cold filtrate stream is then contacted with
the warm waxy oil feed by indirect heat exchange. After
heat exchange with the warm waxy oil feed, the filtrate is
25 sent to an oil/solvent separation operation in which the
remaining solvent is removed from the dewaxed oil and
recycled to the dewaxing process and the wax free
lubricating oil stock product is recovered.

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