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(54) Titre : PROCÉDÉS DE FORMATION DE MOUSSE DE VAPEUR D’EAU POUR LE DRAINAGE PAR GRAVITÉ ASSISTÉ PAR INJECTION DE VAPEUR D’EAU  
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(57) Abrégé/Abstract:  
Methods for making efficient use of steam in a steam-assisted gravity drainage (SAGD) process for recovering heavy oils from tar sands and similar petroleum deposits are disclosed. The methods utilize a surfactant to generate steam foam in ways that maximize efficient use of steam. In some aspects, steam foam is used in water layers or gas caps that reside above steam chambers 4 to prevent loss of steam 6 from the steam chamber 4. The predominant use of relatively dry steam in SAGD processes makes it challenging to find ways to introduce surfactants 5 and generate steam foam 8. However, decreasing the mobility of the steam 6 by converting at least some of it to foam 8 allows the wellbore and steam chambers 4 above the injection site to be more fully developed, provides for more effective heat transfer to the heavy oil and rock, improves production, and allows recovery of the heavy oil with a minimum amount of steam usage.