

Title (en)

SCREEN CYLINDER STRESS CONCENTRATION RELIEF

Title (de)

SIEBZYLINDER MIT SPANNUNGSKONZENTRATIONSVERMINDERUNG

Title (fr)

RELAXATION DE LA CONCENTRATION DES CONTRAINTES DANS UN CYLINDRE TAMISEUR

Publication

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Application

EP 99924621 A 19990608

Priority

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- US 8836998 P 19980608

Abstract (en)

[origin: WO9964664A1] A screen cylinder, and a method of making the screen cylinder, take into account the stress concentrations that are formed, particularly at the inner and outer surfaces of the finished screen cylinder, so as to minimize them. The stress relief minimization is accomplished by providing a plurality of stress relief grooves (25) in land areas (121) between accept flow providing grooves (113) that are in substantially end-to-end alignment, the stress relief grooves each having a depth between about 10-80 % (e.g. between about 40-60 %) of the thickness dimension (119) of the plate (110), so as to reduce by at least 10 % (e.g. about 30-50 %) the magnitude of deformation of the screen slots (115) due to compression or tension in the surfaces of the screen cylinder as a result of cylinder formation from the plate, compared to if the relief grooves were not present.

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