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(54) Title: UNSINTERED MESH SAND CONTROL SCREEN

(57) Abstract: A particle control screen assembly (10) for a perforated pipe used in a well. The particle control screen assembly (10) includes a screen (60) with a first end (62) and a second end (64). The screen includes a first and a second unsintered woven mesh layer, each layer having a first longitudinal edge and a second longitudinal edge. The cylindrical screen (60) also includes openings sized to prevent passage of particulate material and a longitudinal metal weld adjacent the first (92) and second longitudinal edges (94) of the first and second unsintered woven mesh layers. The longitudinal metal weld secures the edges of the unsintered woven mesh layers together. The particle control screen assembly (10) also includes a weld-compatible metal structure (70) adjacent the first end (62) of the cylindrical screen. A circumferential metal weld (78) between the cylindrical screen (60 and the metal structure (70) bonds a portion of the metal structure (70) and a portion of the cylindrical screen (60).