# ABSTRACT

## PROCESSING LIQUID FOR INK-JET RECORDING, INK SET, CARTRIDGE CONTAINING THEM, AND, IMAGE FORMING PROCESS AND IMAGE FORMING APPARATUS FOR INK-JET RECORDING THEREWITH

Disclosed is a processing liquid for ink-jet recording that can produce clear as well as glossy images without occurrences of feathering even when printing is carried out on plain paper, and also that can afford high reliability without occurrences of clogging of ink-jet nozzles due to drying even when the processing liquid is allowed to stand for a long period; also disclosed are an ink set of the processing liquid and ink, and a cartridge containing the ink set, and, an image forming process and an image forming apparatus for ink-jet recording that utilize the processing liquid, ink set, and cartridge.

The processing liquid for ink-jet recording according to the present invention comprises fine particles that react with a coloring material when the processing liquid contacts with a recording liquid that comprises the coloring material and water, and a water-soluble organic solvent having a boiling point of 210 °C or more,

wherein the content (a wt %) of fine particles and the content (b wt %) of the water-soluble organic solvent having a boiling point of 210 °C or more satisfy the following relation: $10 \leq a < 40$, $b/a > 1.50$;

wherein the content (a) and content (b) are expressed by weight ratio based on the total amount of processing liquid (wt %)

Figure 1