

SENSING BLEND COLOR
HOMOGENEITY

ABSTRACT OF THE DISCLOSURE

5 An apparatus for sensing color blend homogeneity in a mixture having a first and second blend portion includes a light transmissive plate for holding the mixture, a light source for emitting a light beam, and a color sensor optically coupled to the light source. An illumination assembly has a first end optically coupled to the light
10 source and a second end optically coupled to and disposed normal to the light transmissive plate so as to illuminate the mixture disposed on the plate with the light beam. At least one detection assembly is provided, having a first end disposed adjacent the light transmissive plate so as to detect the diffuse reflection from the illuminated mixture.
15 Next, the color sensor collects the diffuse reflecting light from the first and second material blends and transforms the diffuse reflecting light into tri-color signals so as to determine the local and global homogeneity of the first and second material blend portions.

Figure 1