Jianning Su* (jsu007@latech.edu), Program of Mathematics and Statistics, P. O. Box 10438, Louisiana Tech University, Ruston, LA 71272, Jinko Kanno (jkanno@latech.edu), Program of Mathematics and Statistics, P. O. Box 10438, Louisiana Tech University, Ruston, LA 71272, and Ko Yamamoto. Generating Planar Quintangulations. Preliminary report.

A *quintangulation* is a 2-connected simple plane graph with each face bounded by a closed walk of length five. We define the standard form of the quintangulation and show that every quintangulation can be transformed into the standard form by two kinds of diagonal transformations. As a corollary, we prove that any two quintangulations with the same number of vertices can be transformed into each other. (Received September 22, 2010)