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*Generators of toric ideals of graphs.*

Let  $G = (V, E)$  be a graph, where  $V = \{x_1, \dots, x_n\}$  and  $E = \{y_1, \dots, y_m\}$  are the vertex set and the edge set respectively. The toric ideal  $P_G$  associated to  $G$  is the kernel of the graded homomorphism of  $k$ -algebras

$$\phi: k[y_1, \dots, y_m] \rightarrow k[x_1, \dots, x_n],$$

induced by,  $\phi(y_i) = x_k x_j$ , where  $y_i = \{x_k, x_j\}$ .

We present a characterization of the primitive, the minimal, the indispensable and the fundamental binomials of the toric ideal  $P_G$ . (Received April 12, 2010)