A polynomial time algorithm to find a linkless embedding of a graph

An embedding of a graph in 3-space is linkless if each pair of disjoint circuits has zero linking number. Graphs that have linkless embeddings can be considered as 3-dimensional analogues of planar graphs. If a graph has a linkless embedding, then each of its minors also has a linkless embedding. Hence the class of graphs that have a linkless embedding can be characterized by a finite collection of forbidden minors. This collection of forbidden minors was found by Robertson, Seymour, and Thomas, and consists of seven graphs. By the work of Robertson and Seymour, it can be checked in polynomial time whether a graph has a linkless embedding or not. It is a different question to find a linkless embedding. In this talk I will present a polynomial time algorithm to find a linkless embedding of a graph provided it has one.