**INTRODUCTION**

Cartoon exaggerates target. This fact is a special feature of cartoon and it makes cartoons as the cartoon. But, the exaggeration on the cartoon is very hard to express to every users. So, only cartoon specialists make cartoons.

To help novice to easily create a cartoon, studies those create cartoon like images using a computer were progressed, called cartoon rendering[1,2]. But, most of cartoon rendering method couldn’t express their results variously, because their results made by a fixed algorithm.

And some other cartoon rendering methods provide various results by textures or user interactions[3,4]. But, their methods were not intuitive methods. So they were difficult to use to novices.

To enhance the shortcoming of previous cartoon rendering methods, This paper proposes an cartooning method which every users can easily create cartoon-like result images. we deform the input image using the reference image and apply the cartooning to it. At this time, the user can control the deforming / cartooning intensities of the target image.

The main contribution of this paper is as follows. It proposes the cartooning method using reference images for every users to generate the result easily. By the controlling of deforming / cartooning intensities, we can create various results from an input image.