



**Official document from Siemens
certifying that the ring configurations on brain CTs
are not artifacts**

Erlangen, 22.12.1989

The undersigned have elaborated the following eight exclusion criteria to eliminate the possibility of ring artifacts:

The following preclude the possibility of a ring artifact:

1. If there is a similar ring formation clearly visible in the MRI.
2. If the rings are not round but dented, i.e. there are obvious masses at the same time.
3. If there are deposits of glial tissue in the circular formation.
4. If one or more rings are not centered on the pivotal centre of the shot (para-central target configuration).
5. If there are more circles simultaneously adjacent to each other, only one of the ring formations at most could be one ring artifact.
6. If the ring formations have a clinical radiological 'course', i.e. the sequential follow-up CT's show them at the same locations but changed.
7. Those artifacts generated by the installation are structures that are circular or in the form of a circular segment centered on the pivotal centre of the shot. If such structures could possibly represent real anatomical structures, a re-take of the picture is advisable with a lateral or vertical displacement of the patient position. If the repeated tomography clearly shows the structures without relative displacement, then these are not artifacts.

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Address and signatures