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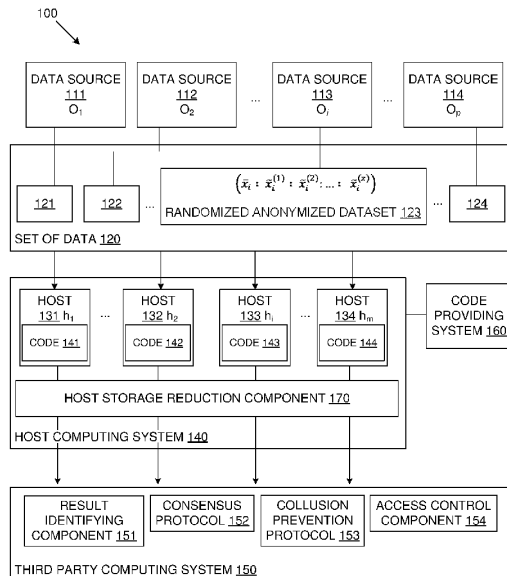


FIG. 1A

- (57) **Abstract:** Systems and methods for ensuring data privacy
in a data sharing system are provided. A computer implemented
method carried out at a host computing system includes: access-
ing a set of data from a data source including a true element and
at least one spurious element so that the host computing system
cannot differentiate between the elements; accessing a code which
is executable on the set of data; and processing the set of data,
including for each element: executing the code on the element to
generate a result; computing a hash value of the element; and out-
putting the result in association with the hash value to a third-party
computing system that has access to the true hash value of the
true element for identification of the result generated by execution of
the code on the true element.

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