

August 25, 2010

Bill Belitsky, Esq.
Paul, Hastings, Janofsky & Walker LLP
75 East 55th Street
New York, New York 10022

Re: Van Kampen Unit Trusts, Series 1027
File No. 333-169004

Dear Mr. Belitsky:

We have reviewed the registration statement on Form S-6 for the Van Kampen Unit Trusts, Series 1027 (the "Trust"), filed with the Commission on August 23, 2010. The registration statement offers the Ibbotson Long/Short Strategy Portfolio 2010-3 (the "portfolio"). Based upon Securities Act Release No. 6510 and the representations contained in your letter of August 23, 2010, we conducted a selective review of the registration statement. We have the following comments.

We note that portions of the filing are incomplete. We may have additional comments on such portions when you complete them in a pre-effective amendment, on disclosures made in response to this letter, on information supplied supplementally, or on exhibits added in any pre-effective amendments. Please note that comments we give in one section apply to other sections in the filing that contain the same or similar disclosure.

Please advise us if you have submitted or expect to submit an exemptive application or no-action request in connection with your registration statement.

Response to this letter should be in the form of a pre-effective amendment filed pursuant to Rule 472 under the Securities Act. Where no change will be made in the filing in response to a comment, please indicate this fact in a supplemental letter and briefly state the basis for your position.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the Trust and its management are in possession of all facts relating to the Trust's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the Trust requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Trust from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Trust may not assert this action as defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Investment Management in connection with our review of your filing or in response to our comments on your filing.

Should you have any questions regarding this letter, please contact me at (202) 551-6965.

Sincerely,

Vincent J. Di Stefano
Senior Counsel